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**CUSTOM-RU**

**PROTOCOL MANUAL**

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# PROTOCOL DESCRIPTION

The printer communicates through a protocol that allows to fully control its status.

The protocol structure is as follows:

START FIELD(1 byte): always 01h

LENGTH OF PACKAGE FIELD(2 byte): length of the “COMMAND FIELD” and “DATA FIELD”

COMMAND FIELD(1 byte): command(see below)

DATA FIELD(N byte): data of the commands(see below)

CRC FIELD(1 byte): crc of the fields “LENGTH OF PACKAGE FIELD” “LENGTH OF PACKAGE” “DATA”. CRC is calculated as a 16 bits sum of the bytes in the fields(SUM). CRC FIELD is the XOR of the 8 lower bits of SUM with the higher 8 bits of SUM. Example, package:

**01**(START)

**0A 00**(LENGTH OF PACKAGE)

**50**(COMMAND FIELD)

3F 42 0F 00 E8 03 00 00 00(DATA FIELD)

**D4**(CRC FIELD)

Sum of 0A 00 50 3F 42 0F 00 E8 03 00 00 00 = 1D5

CRC = 1 XOR D5 = D4

**NOTE**: in commands description, when the format of the data field is labeled as “LENGTH\_PREFIXED\_TEXT X of xxx to yyy bytes”, this means that the first 2 bytes are the **length** of the field and then follows **length** chars as text(xxx=minimum length, yyy=maximum length). “LENGTH\_PREFIXED\_TEXT X of xxx or yyy bytes”, this means that the first 2 bytes are the **length** of the field and then follows **length** chars as text(allowed lengths: xxx or yyy, others not allowed). Example:

* 0500 616263646465: this is a text of 5 chars with value “abcde”;
* 0000: this is an empty text;

**IMPORTANT: protocol 1.05 and 1.1 commands versions are draft and subjected to any change**

# LIST OF COMMANDS AND DESCRIPTION

## 04H: Get parameters family values

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command 04h. Message length: 7 bytes.

• Operator Password (4 bytes)

• Number of the parameters family to read(2 bytes)

Answer: 04h. Message Length: 4+size of “Values of the parameters family” field.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Values of the parameters family (X bytes)

See appendix A1 for parameters families list.

## 05H: Set parameters family values

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command 05h. Message length: 7+size of “Values of the parameters family to write” field.

• Operator Password (4 bytes)

• Number of the parameters family to write(2 bytes)

• Values of the parameters family to write(X bytes)

Answer: 05h. Message Length: 4 byte.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

See appendix A1 for parameters families list.

## 09H: Get parameters family row values

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command 09h. Message length: 9 bytes.

• Operator Password (4 bytes)

• Number of the parameters family to read (2 bytes)

• Number of the row to read (2 bytes)

Answer: 09h. Message Length: 4+size of “Values of the parameters family row” field.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Values of the parameters family row (X bytes)

See appendix A2 for parameters families list.

## 0AH: Set parameters family row values

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command 0Ah. Message length: 7+size of “Values of the parameters family row to write” field.

• Operator Password (4 bytes)

• Number of the parameters family to write (2 bytes)

• Number of the row to write (2 bytes)

• Values of the parameters family row to write(X bytes)

Answer: 0ah. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

See appendix A2 for parameters families list.

## 13H: Beep

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 13H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: 13H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## 16H: Technological reset

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 16H. Message length: 5 byte.

• Operator Password (4 bytes)

Answer: 16H. Message length: 3 bytes.

• Error code (2 bytes)

## 1DH: Registration and re-registration

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 1dH. Message length: 649 bytes.

• Operator Password (4 bytes)

• REGISTRATION TYPE (1 byte, list)

0~ПЕРВАЯ РЕГИСТРАЦИЯ ККТ  
1~ИЗМ. ПАРАМ. ККТ С ЗАМЕНОЙ ФН  
2~ИЗМ. ПАРАМ. ККТ БЕЗ ЗАМЕНЫ ФН

• REASON OF REREGISTRATION (1 byte, list)

1~ЗАМЕНА ФН  
2~ИЗМЕНЕНИЕ ИНН ОФД  
3~ИЗМ. СВЕД. ОБ АДР./ПОЛЬЗОВАТЕЛЕ

• PAYMENT ADDRESS (250 bytes, text)

• USER NAME (250 bytes, text)

• USER INN (12 bytes, text)

• OFD INN (12 bytes, text)

• ECR MODEL REGISTRATION NUMBER (10 bytes, text)

• REGISTRATION NUMBER (20 bytes, text)

• CASHIER (64 bytes, text)

• ENCODING (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• OFFLINE MODE (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• AUTOMATIC (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• SERV HUMAN SPH (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• STRICT ACC FORM (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• ECR FOR INTERNET (1 byte, text)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• AUTOMATIC NUMBER (12 bytes, text)

• TRADITIONAL (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• LIGHT INCOME (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• LIGHT INCOME, NO EXPENSES (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• SINGLE TAX (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• AGRICULTURAL TAX (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• PATENT TAX SYS (1 byte, text)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

Answer: 1dH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Registration and re-registration

Command: 1dH. Message length: variable number of bytes.

• (1)Operator Password (4 bytes)

• (2)Flags (2 bytes)

Bit 1: print(0)/no print(1)

Bit 2: don’t save on file(0)/save on file(1)

Bit 0, 3..15: must be 0

• (3)FFD VERSION NUMBER (1 byte)

2~1.05

3~1.1

• (4)ТИП РЕГИСТРАЦИИ(1 byte)

0~ПЕРВАЯ РЕГИСТРАЦИЯ ККТ

1~ИЗМ. ПАРАМ. ККТ С ЗАМЕНОЙ ФН

2~ИЗМ. ПАРАМ. ККТ БЕЗ ЗАМЕНЫ ФН

• (5)ИЗМ. СВЕД. О ККТ(1 byte)

1~ЗАМЕНА ФН

2~ЗАМЕНА ОФД

3~ИЗМЕНЕНИЕ РЕКВИЗИТОВ

4~ИЗМЕНЕНИЕ НАСТРОЕК ККТ

• (6)АДРЕС РАСЧЕТОВ(#1009)(LENGTH\_PREFIXED\_TEXT of 1 to 256 bytes)

• (7)МЕСТО РАСЧЕТОВ(#1187) (LENGTH\_PREFIXED\_TEXT of 1 to 256 bytes)

• (8)НАИМ. ПОЛЬЗОВАТЕЛЯ(#1048) (LENGTH\_PREFIXED\_TEXT of 1 to 256 bytes)

• (9)ИНН ПОЛЬЗОВАТЕЛЯ(#1018) (12 bytes)

• (10)РН ККТ(#1037) (16 bytes)

• (11)КАССИР(#1021) (LENGTH\_PREFIXED\_TEXT of 0 to 64 bytes)

• (12)ШФД(#1056) (1 byte, range 0..1)

• (13)АВТОНОМН. РЕЖИМ(#1002) (1 byte, range 0..1)

• (14)САЙТ ФНС(#1060) (LENGTH\_PREFIXED\_TEXT of 0 to 256 bytes)

• (15)ОФД(#1046) (LENGTH\_PREFIXED\_TEXT of 0 to 256 bytes)

• (16)ИНН ОФД(#1017) (12 bytes)

• (17)ЭЛ. АДР. ОТПРАВИТЕЛЯ(#1117) (LENGTH\_PREFIXED\_TEXT of 0 to 64 bytes)

• (18)АВТОМАТ. РЕЖИМ(#1001) (1 byte, range 0..1)

• (19)АВТОМАТ(#1036) (20 bytes)

• (20)ККТ ДЛЯ УСЛУГ(#1109) (1 byte, range 0..1)

• (21)АС БСО(#1110) (1 byte, range 0..1)

• (22)ККТ ДЛЯ ИНТЕРНЕТ(#1008) (1 byte, range 0..1)

• (23)ПРИНТЕР В АВТОМАТЕ(#1221) (1 byte, range 0..1)

• (24)ПОДАКЦИЗНЫЕ ТОВАРЫ(#1207) (1 byte, range 0..1)

• (25)ПРОВЕДЕНИЕ АЗАРТНОЙ ИГРЫ(#1193) (1 byte, range 0..1)

• (26)ПРОВЕДЕНИЕ ЛОТЕРЕИ(#1126) (1 byte, range 0..1)

• (27)БАНК. ПЛ. АГЕНТ(#1057, bit 0) (1 byte, range 0..1)

• (28)БАНК. ПЛ. СУБАГЕНТ(#1057, bit 1) (1 byte, range 0..1)

• (29)ПЛ. АГЕНТ(#1057, bit 2) (1 byte, range 0..1)

• (30)ПЛ. СУБАГЕНТ(#1057, bit 3) (1 byte, range 0..1)

• (31)ПОВЕРЕННЫЙ(#1057, bit 4) (1 byte, range 0..1)

• (32)КОМИССИОНЕР(#1057, bit 5) (1 byte, range 0..1)

• (33)АГЕНТ(#1057, bit 6) (1 byte, range 0..1)

• (34)ОСН(#1062, bit 0) (1 byte)

0~НЕТ

1~ДА

• (35)УСН ДОХОД(#1062, bit 1) (1 byte)

0~НЕТ

1~ДА

• (36)УСН ДОХОД - РАСХОД(#1062, bit 2) (1 byte)

0~НЕТ

1~ДА

• (37)ЕНВД(#1062, bit 3) (1 byte)

0~НЕТ

1~ДА

• (38)ЕСН(#1062, bit 4) (1 byte)

0~НЕТ

1~ДА

• (39)ПАТЕНТ(#1062, bit 5) (1 byte)

0~НЕТ

1~ДА

Answer: 1dH. Message Length: 12 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Document number (4 bytes)

• Document fiscal sign (4 bytes)

## 1EH: Registration close

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 1eH. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: 1eH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 1eH. Message length: 7 bytes.

• (1)Operator Password (4 bytes)

• (2)Flags (2 bytes)

Bit 1: print(0)/no print(1)

Bit 2: don’t save on file(0)/save on file(1)

Bit 0, 3..15: must be 0

Answer: 1eH. Message Length: variable number of bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Session number (2 bytes)

• Document number (4 bytes)

• Document fiscal sign (4 bytes)

• Cashier name (LENGTH\_PREFIXED\_TEXT of 0 to 64 bytes)

## 1FH: Report about payment

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 1fH. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: 1fH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 1fH. Message length: 7 bytes.

• (1)Operator Password (4 bytes)

• (2)Flags (2 bytes)

Bit 1: print(0)/no print(1)

Bit 2: don’t save on file(0)/save on file(1)

Bit 0, 3..15: must be 0

Answer: 1fH. Message Length: 12 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Document number (4 bytes)

• Document fiscal sign (4 bytes)

## 20H: IMEMORY READ(RESERVED)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 20H. Message length: 11 bytes.

• Operator Password (4 bytes)

• Source address(4 bytes)

• Number of bytes to read(2 bytes)(0 to 512)

Answer: 20H. Message length: variable number of bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Array of read byte (“Number of bytes to read” bytes)

## 21H: Time Programming

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 21H. Message length: 8 bytes.

• Operator Password (4 bytes)

• Time (3 bytes) H-M-S

Answer: 21H. Message length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## 22H: Date Programming

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 22H. Message length: 8 bytes.

• Operator Password (4 bytes)

• Date (3 bytes) D-M-Y

Answer: 22H. Message length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## 23H: Confirmation of the date of programming

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 23H. Message length: 8 bytes.

• Operator Password (4 bytes)

• Date (3 bytes) D-M-Y

Answer: 23H. Message length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## 25H: Cut a check

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 25H. Message length: 6 bytes.

• Operator Password (4 bytes)

• Cut type (1 byte) "0" - complete, "1" - incomplete

Answer: 25H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## 28H: Open cash drawer

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 28H. Message length: 6 bytes.

• Operator Password (4 bytes)

• The number of cash drawer (1 byte) 0 1

Answer: 28H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## 29H: Feeding

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 29H. Message length: 7 bytes.

• Operator Password (4 bytes)

• Flags (1 byte) Bit 0 - control tape, Bit 1 - check tape, Bit 2 - underlaid document.

• The number of lines (1 byte) 1 ... 255 - maximum number of lines is limited by

printer buffer size, but does not exceed 255

Answer: 29H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## 2BH: COVER OPEN

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | X | X |

Command: 2BH. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: 2BH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

VERIFICARE SE SERVE

## 2CH: ICONS UPLOAD FROM SD-CARD

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | X | X |

Command: 2CH. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: 2CH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

VERIFICARE SE C’E’ SD-CARD

## 2DH: FIRMWARE UPLOAD FROM SD-CARD

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | X | X |

Command: 2DH. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: 2DH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

VERIFICARE SE C’E’ SD-CARD

## 2EH: TEST HARDWARE

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | - | - |

Command: 2EH. Message length: 8 bytes.

• Operator Password (4 bytes)

• Test Type(1 byte):

* 2=test printer #1;
* 4=test printer roll;
* 5=test printer #2;
* 6=test printer speed;

• Number of repetitions(2 bytes)

Answer: 2EH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | X | X |

Command: 2EH. Message length: 8 bytes.

• Operator Password (4 bytes)

• Test Type(1 byte):

* 1=test display;
* 2=test printer #1;
* 4=test printer roll;
* 5=test printer #2;
* 6=test printer speed;

• Number of repetition(2 bytes)

Answer: 2EH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## 2FH: GET TEST HARDWARE RESULT

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 2FH. Message length: 6 bytes.

• Operator Password (4 bytes)

• Test Type(1 byte). For values, see command 2EH, field “Test type”

Answer: 2FH. Message Length: 8 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Result (4 bytes)

## 40H: Daily report without clearing

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 40H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: 40H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 40H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: 40H. Message Length: 7 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte)

• Day is open(1)/Day is closed(0)(1 byte)

• Session number (2 bytes)

## 41H: Daily report with clearing

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 41H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: 41H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 41H. Message length: 7 bytes.

• Operator Password (4 bytes)

• Flags (2 bytes)

Bit 1: print(0)/no print(1)

Bit 2: don’t save on file(0)/save on file(1)

Bit 0, 3..15: must be 0

Answer: 41H. Message Length: variable number of bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte)

• Session number (2 bytes)

• Document number (4 bytes)

• Document fiscal sign (4 bytes)

• Cashier name (LENGTH\_PREFIXED\_TEXT of 0 to 64 bytes)

## 42H: Statistic report without clearing

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 42H. Message length: 7 bytes.

• Operator Password (4 bytes)

• Flags (2 bytes)

20 -> Department report, day

21 -> Department report, period

51 -> Vat report

Answer: 42H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte)

## 43H: Statistic report with clearing

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 43H. Message length: 7 bytes.

• Operator Password (4 bytes)

• Flags (2 bytes)

21 -> Department report, period

51 -> Vat report

Answer: 43H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte)

## 49H: FILE DELETE

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 49H. Message length: variable number of bytes.

• Operator Password (4 bytes)

• File Name (X bytes)

File name must be a fully qualified file name(e.g. “nor:bico001.bmp”, “nor:q.bmp”, “nor:rep.bin”). If source disk is not present, “nor:” is added automatically. Only “nor:bico0xx.bmp” are available for writing.

Answer: 49H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte)

## 4AH: FILE SIZE

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 4AH. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: 4AH. Message Length: 8 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte)

• Size of file(in bytes) (4 bytes)

## 4BH: FILE OPEN

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 4BH. Message length: variable number of bytes.

• Operator Password (4 bytes)

• Access Mode (3 bytes)

* r 🡪 Opens text file for reading.
* w 🡪 Truncates to zero length or creates text file for writing.
* a 🡪 Appends; opens/creates text file for writing at endof-file.
* rb 🡪 Opens binary file for reading.
* wb 🡪 Truncates to zero length or creates binary file for writing.
* ab 🡪 Appends; opens/creates binary file for writing at end-of-file.
* r+ 🡪 Opens text file for update (reading and writing).
* w+ 🡪 Truncates to zero length or creates text file for update.
* a+ 🡪 Appends; opens/creates text file for update, writing at end-of-file.
* rb+ 🡪 Opens binary file for update (reading and writing).
* wb+ 🡪 Truncates to zero length or creates binary file for update.
* ab+ 🡪 Appends; opens/creates binary file for update, writing at end-of-file.

• File Name (X bytes)

File name must be a fully qualified file name(e.g. “nor:bico001.bmp”, “nor:q.bmp”, “nor:rep.bin”). ”. If source disk is not present, “nor:” is added automatically. Only “nor:bico0xx.bmp” are available for writing.

Answer: 4BH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte)

## 4CH: FILE READ

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 4CH. Message length: 7 bytes.

• Operator Password (4 bytes)

• Number of byte to read (2 bytes)

Answer: 4CH. Message Length: variable number of bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte)

• Number of read byte (2 bytes)

• Array of read byte (“Number of read byte” bytes)

## 4DH: FILE WRITE

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 4DH. Message length: variable number of bytes.

• Operator Password (4 bytes)

• Number of byte to write (2 bytes)

• Array of byte to write (“Number of byte to write” bytes)

Answer: 4DH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte)

## 4EH: FILE SEEK

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 4EH. Message length: 13 bytes.

• Operator Password (4 bytes)

• Offset (4 bytes)

• Origin (4 bytes)

* 0 🡪 set
* 1 🡪 cur
* 2 🡪 end

Answer: 4EH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte)

## 4FH: FILE CLOSE

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 4FH. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: 4FH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte)

## 50H: Deposit

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 50H. Message length: 10 bytes.

• Operator Password (4 bytes)

• Amount (5 bytes)

Answer: 50H. Message length: 6 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Through document number (2 bytes)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 50H. Message length: 13 bytes.

• Operator Password (4 bytes)

• Amount (8 bytes)

Answer: 50H. Message length: 14 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Through document number (2 bytes)

• Cash in drawer(8 bytes)

## 51H: Withdrawal

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 51H. Message length: 10 bytes.

• Operator Password (4 bytes)

• Amount (5 bytes)

Answer: 51H. Message length: 6 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Through document number (2 bytes)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 51H. Message length: 13 bytes.

• Operator Password (4 bytes)

• Amount (8 bytes)

Answer: 51H. Message length: 14 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Through document number (2 bytes)

• Cash in drawer(8 bytes)

## 80H: Sale

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 80H. Message length: 56 bytes.

• Operator Password (4 bytes)

• Quantity (5 bytes) 0000000000... 9999999999

• Price (5 bytes) 0000000000... 9999999999

• Department number (1 byte) 0 ... 16

• text (40 bytes)

Answer: 80H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 80H. Message length: variable number of bytes.

• (1)Operator Password (4 bytes)

• (2)Flag (2 bytes) 0..15

* Bit 0 -> 1 the command has the “Discount/Add-on type” and “Discount/Add-on value” fields
* Bit 1 -> 1 the command has the “Additional property of payment subject(#1191)” field
* Bit 2 -> 1 the command has the “Code of Goods Assortment(#1162)” field
* Bit 3 -> 1 the command has the “Number of customs declaration(#1231)” field(must be 0 for version 03.2017)
* Bit 4 -> 1 exclude this item from any discount/add-on on subtotal operation(command 90h)

• (3)Way of payment flag(#1214)(1 byte) 0...7, if “0” tag is not included into sale line

• (4)Flag of payment subject(#1212)(1 byte) 0...13, if “0” tag is not included into sale line

• (5)Code of country producer(#1230)(3 digits) , if “000” tag is not included into sale line(must be “000” for version 03.2017)

• (6)Quantity(#1023)(5 bytes) 0000000000... 9999999999

• (7)Price(#1079)(8 bytes) 0000000000... 9999999999

• (8)Excise(#1229)(8 bytes) 0000000000... 9999999999, if “0.00” tag is not included into sale line(must be 0 for version 03.2017)

• (9)Department number (1 byte) 0 ... 16

• (10)Discount/Add-on type(1 byte)(only if bit0 of “Flag” field is 1)

* Bit 0: discount(0)/add-on(1)
* Bit 1: value(0)/%(1)

• (11)Discount/Add-on value (8 bytes) 0000000000... 9999999999 (only if bit0 of “Flag” field is 1)

• (12)Text(#1030)(LENGTH\_PREFIXED\_TEXT of 1 to 53 or 57 bytes, depending on bits “Suppress sale line number if needed” or “Always suppress sale line number”)

• (13)Additional property of payment subject(#1191)(LENGTH\_PREFIXED\_TEXT of 1 to 64 bytes)(only if bit#1 of “Flag” field is 1)

• (14)Code of Goods Assortment(#1162)(LENGTH\_PREFIXED\_TEXT of 1 to 32 bytes)(only if bit#2 of “Flag” field is 1)

• (15)Number of customs declaration(#1231)(LENGTH\_PREFIXED\_TEXT of 1 to 32 bytes)(only if bit#3 of “Flag” field is 1)

Answer: 80H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## 81H: Purchase

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 81H. Message length: 56 bytes.

• Operator Password (4 bytes)

• Quantity (5 bytes) 0000000000... 9999999999

• Price (5 bytes) 0000000000... 9999999999

• Department number (1 byte) 1 ... 16

• text (40 bytes)

Answer: 81H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

FOR COMMAND 81H, FORMAT IS THE SAME OF COMMAND 80H.

PLEASE CHECK COMMAND 80H(JUST USE 81H IN PLACE OF 80H).

## 82H: Sale Return

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 82H. Message length: 56 bytes.

• Operator Password (4 bytes)

• Quantity (5 bytes) 0000000000... 9999999999

• Price (5 bytes) 0000000000… 9999999999

• Department number (1 byte) 1 ... 16

• text (40 bytes)

Answer: 82H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

FOR COMMAND 82H, FORMAT IS THE SAME OF COMMAND 80H.

PLEASE CHECK COMMAND 80H(JUST USE 82H IN PLACE OF 80H).

## 83H: Purchase Return

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 83H. Message length: 56 bytes.

• Operator Password (4 bytes)

• Quantity (5 bytes) 0000000000... 9999999999

• Price (5 bytes) 0000000000... 9999999999

• Department number (1 byte) 1 ... 16

• text (40 bytes)

Answer: 83H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

FOR COMMAND 83H, FORMAT IS THE SAME OF COMMAND 80H.

PLEASE CHECK COMMAND 80H(JUST USE 83H IN PLACE OF 80H).

## 84H: Entry Reverse

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 84H. Message length: 56 bytes.

• Operator Password (4 bytes)

• Quantity (5 bytes) 0000000000... 9999999999

• Price (5 bytes) 0000000000... 9999999999

• Department number (1 byte) 1 ... 16

• text (40 bytes)

Answer: 84H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 84H. Message length: variable number of bytes.

• Operator Password (4 bytes)

• Quantity (5 bytes) 0000000000... 9999999999

• Price (8 bytes) 0000000000... 9999999999

• Department number (1 byte) 1 ... 16

• Text (LENGTH\_PREFIXED\_TEXT of 1 to 53 or 57 bytes, depending on bits “Suppress sale line number if needed” or “Always suppress sale line number”)

Answer: 84H. Message Length: 16 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Check Subtotal (8 bytes) 0000000000... 9999999999

• Session number (2 bytes)

• Check number (2 bytes)

## 85H: Check closing

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 85H. Message length: 30 bytes.

• Operator Password (4 bytes)

• Sum, Payment Type #1(by cash)(5 bytes) 0000000000... 9999999999

• Sum, Payment Type #2(by electronic)(5 bytes) 0000000000... 9999999999

• Sum, Payment Type #3(in advance)(5 bytes) 0000000000... 9999999999

• Sum, Payment Type #4(for posterior)(5 bytes) 0000000000... 9999999999

• Sum, Payment Type #5(by counter means)(5 bytes) 0000000000... 9999999999

Answer: 85H. Message length: 9 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Change/Remainder (5 bytes) 0000000000... 9999999999 (>0 change, <0 remainder to pay)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 85H. Message length: variable number of bytes.

• (1)Operator Password (4 bytes)

• (2)Flag (2 bytes) 0..7

* Bit 0 -> 1=field “Additional property of check(#1192)” is present
* Bit 1 -> 1=field “Receiver(Purchaser)(#1227)” is present(must be 0 for version 03.2017)
* Bit 2 -> 1=field “Receiver(Purchaser) INN(#1228)” is present(must be 0 for version 03.2017)
* Bit 3 -> 1=enable rounding of ticket subtotal to 1.00 rubles(e.g. 1.75RUB🡪1.00RUB) for cash payment part, if possible
* Bit 4..15 -> RESERVED

• (3)Sum, Payment Type #1 (by cash)(8 bytes) 0000000000... 9999999999

• (4)Sum, Payment Type #2 (by electronic)(8 bytes) 0000000000... 9999999999

• (5)Sum, Payment Type #3 (in advance)(8 bytes) 0000000000... 9999999999

• (6)Sum, Payment Type #4 (for posterior)(8 bytes) 0000000000... 9999999999

• (7)Sum, Payment Type #5 (by counter means)(8 bytes) 0000000000... 9999999999

• (8)Additional property of check(#1192)(LENGTH\_PREFIXED\_TEXT of 1 to 16 bytes)(only if bit0 of “Flag” field is 1)

• (9)Receiver (Purchaser)(#1227)(LENGTH\_PREFIXED\_TEXT of 1 to 128 bytes)(only if bit#1 of “Flag” field is 1)

• (10)Receiver (Purchaser) INN(#1228)(LENGTH\_PREFIXED\_TEXT of 10 or 12 bytes)(only if bit#2 of “Flag” field is 1)

Answer: 85H. Message length: variable number of bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Change/Remainder (8 bytes) 0000000000... 9999999999 (>0 change, <0 remainder to pay)

• Session number (2 bytes)

• Check number (2 bytes)

• Document number(0=ticket not closed)(4 bytes)

• Document fiscal sign(0=ticket not closed) (4 bytes)

• Cashier name (LENGTH\_PREFIXED\_TEXT of 0 to 64 bytes)

## 86H: Discount

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 86H. Message length: 10 bytes.

• Operator Password (4 bytes)

• Sum (5 bytes) 0000000000... 9999999999

Answer: 86H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## 87H: Extra charge

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 87H. Message length: 10 bytes.

• Operator Password (4 bytes)

• Sum (5 bytes) 0000000000... 9999999999

Answer: 87H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## 88H: Check cancellation

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 88H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: 88H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## 89H: Check subtotal

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 89H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: 89H. Message length: 9 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• check Subtotal (5 bytes) 0000000000... 9999999999

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 89H. Message length: 7 bytes.

• Operator Password (4 bytes)

• Flag, bit 0->print(1)/no print(0)(2 bytes)

Answer: 89H. Message length: 16 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• check Subtotal (8 bytes) 0000000000... 9999999999

• Session number (2 bytes)

• Check number (2 bytes)

## 8CH: Repeat document

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Team: 8CH. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: 8CH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

Note: The command prints a copy of the last closed document

for sale, purchase, sale return and purchase return.

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Team: 8CH. Message length: 15 bytes.

• Operator Password (4 bytes)

• First ticket to print (4 bytes)

• Last ticket to print (4 bytes)• Type of document (2 byte)

0=last fiscal doc(last saved as file)(“First ticket to print” and “Last ticket to print” must be 0)

1=short report (If “First ticket to print” and “Last ticket to print” are both 0 then the last ticket is printed, else from “First ticket to print” to “Last ticket to print” if tickets are available)

2=full report (If “First ticket to print” and “Last ticket to print” are both 0 then the last ticket is printed, else from “First ticket to print” to “Last ticket to print” if tickets are available)3=transmission report (If “First ticket to print” and “Last ticket to print” are both 0 then the last ticket is printed, else from “First ticket to print” to “Last ticket to print” if tickets are available)

4=registration(First ticket to print” and “Last ticket to print” must be 0)

5=FM status(“First ticket to print” and “Last ticket to print” must be 0)

6=OFD status(“First ticket to print” and “Last ticket to print” must be 0)

Answer: 8CH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## 8DH: Open check

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 8DH. Message length: 6 bytes.

• Operator Password (4 bytes)

• Document Type (1 byte):

0 - sale;

1 - sale return;

2 – purchase;

3 – purchase return;

• Tax code (1 byte):

0 – AUTOMATIC MODE;

1 - traditional;

2 – light, income;

4 – light, income minus expenses;

8 – Single tax for input earnings;

16 – Single agricultural tax;

32 – Patent taxation system;

Answer: 8DH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 8DH. Message length: 9 bytes.

• (1)Operator Password (4 bytes)

• (2)Flags (2 bytes)

Bit 1: print(0)/no print(1)

Bit 2: don’t save on file(0)/save on file(1)

Bit 0, 3..15: must be 0

• (3)Document Type (1 byte):

0 - sale;

1 - sale return;

2 – purchase;

3 – purchase return;

• (4)Tax code (1 byte):

0 – AUTOMATIC MODE;

1 - traditional;

2 – light, income;

4 – light, income minus expenses;

8 – Single tax for input earnings;

16 – Single agricultural tax;

32 – Patent taxation system;

Answer: 8DH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## 8EH: Check closing(ONLY WITH PAYMENTS=0)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: 8EH. Message length: 30 bytes.

• Operator Password (4 bytes)

• Sum, Payment Type #1 (by cash)(5 bytes) 0000000000... 9999999999

• Sum, Payment Type #2 (by electronic)(5 bytes) 0000000000... 9999999999

• Sum, Payment Type #3 (in advance)(5 bytes) 0000000000... 9999999999

• Sum, Payment Type #4 (for posterior)(5 bytes) 0000000000... 9999999999

• Sum, Payment Type #5 (by counter means)(5 bytes) 0000000000... 9999999999

Answer: 8EH. Message length: 9 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Change/Remainder (5 bytes) 0000000000... 9999999999 (>0 change, <0 remainder to pay)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 8EH. Message length: variable number of bytes.

• (1)Operator Password (4 bytes)

• (2)Flag (2 bytes) 0..7

* Bit 0 -> 1=field “Additional property of check(#1192)” is present
* Bit 1 -> 1 the command has the “Receiver(Purchaser)(#1227)” field(must be 0 for version 03.2017)
* Bit 2 -> 1 the command has the “Receiver(Purchaser) INN(#1228)” field(must be 0 for version 03.2017)
* Bit 3 -> 1=enable rounding of ticket subtotal to 1.00 rubles(e.g. 1.75RUB🡪1.00RUB) for cash payment part, if possible
* Bit 4..15 -> RESERVED

• (3)Sum, Payment Type #1 (by cash)(8 bytes) 0000000000... 9999999999

• (4)Sum, Payment Type #2 (by electronic)(8 bytes) 0000000000... 9999999999

• (5)Sum, Payment Type #3 (in advance)(8 bytes) 0000000000... 9999999999

• (6)Sum, Payment Type #4 (for posterior)(8 bytes) 0000000000... 9999999999

• (7)Sum, Payment Type #5 (by counter means)(8 bytes) 0000000000... 9999999999

• (8)Additional property of check(#1192)(LENGTH\_PREFIXED\_TEXT of 1 to 16 bytes)(only if bit0 of “Flag” field is 1)

• (9)Receiver (Purchaser)(#1227)(LENGTH\_PREFIXED\_TEXT of 1 to 128 bytes)(only if bit#1 of “Flag” field is 1)

• (10)Receiver (Purchaser) INN(#1228)(LENGTH\_PREFIXED\_TEXT of 10 or 12 bytes)(only if bit#2 of “Flag” field is 1)

Answer: 8EH. Message length: variable number of bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Change/Remainder (8 bytes) 0000000000... 9999999999 (>0 change, <0 remainder to pay)

• Session number (2 bytes)

• Check number (2 bytes)

• Document number(0=ticket not closed) (4 bytes)

• Document fiscal sign(0=ticket not closed)(4 bytes)

• Cashier name (LENGTH\_PREFIXED\_TEXT of 0 to 64 bytes)

## 8FH: VOID OF LAST ITEM

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 8FH. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: 8FH. Message length: 16 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## 90H: DISCOUNT/ADD-ON ON subtotal

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 90H. Message length: 43 bytes.

• Operator Password (4 bytes)

• Flag(2 bytes):

* Bit 0: discount(0)/add-on(1)
* Bit 1: value(0)/%(1)
* Bit 2: no print subtotals(0)/print subtotals (1)

• Discount/Add-on value (8 bytes) 0000000000... 9999999999

• Description (28 bytes)

Answer: 90H. Message length: 32 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Check Subtotal (8 bytes) 0000000000... 9999999999

• Actual Discounts on the ticket(8 bytes) 0000000000... 9999999999

• Actual Add-On on the ticket (8 bytes) 0000000000... 9999999999

• Session number (2 bytes)

• Check number (2 bytes)

## 91H: DISCOUNT/ADD-ON ON ITEM

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: 91H. Message length: 43 bytes.

• Operator Password (4 bytes)

• Flag(2 bytes):

* Bit 0: discount(0)/add-on(1)
* Bit 1: value(0)/%(1)
* Bit 2: no print subtotals(0)/print subtotals (1)

• Discount/Add-on value (8 bytes) 0000000000... 9999999999

• Description (28 bytes)

Answer: 91H. Message length: 32 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Check Subtotal (8 bytes) 0000000000... 9999999999

• Actual Discounts on the ticket(8 bytes) 0000000000... 9999999999

• Actual Add-On on the ticket (8 bytes) 0000000000... 9999999999

• Session number (2 bytes)

• Check number (2 bytes)

## C0H: FM - SESSION COUNTERS REQUEST(fm command 36h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | X |
| FUSION V4.01.XX | N/A | - | X |

Command: C0H. Message length: 6 bytes.

• Operator Password (4 bytes)

• Counters Type (1 byte)

* 0=current session(#1194)
* 1=fn counter(#1157)

Answer: C0H. Message Length: 358 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: Session number(2 bytes)

• Answer from FM: Operations quantity(#CT.#1134)(4 bytes)

• Answer from FM: Operations quantity – Sales and correction sales(#CT.#1129.#1135)(4 bytes)

• Answer from FM: Sum of payments - Sales and correction sales (#CT.#1129.#1201)(6 bytes)

• Answer from FM: Sum of payment #1(by cash) - Sales and correction sales (#CT.#1129.#1136)(6 bytes)

• Answer from FM: Sum of payment #2(by electronic) - Sales and correction sales (#CT.#1129.#1138)(6 bytes)

• Answer from FM: Sum of payment #3(in advance) - Sales and correction sales (#CT.#1129.#1218)(6 bytes)

• Answer from FM: Sum of payment #4(for posterior) - Sales and correction sales (#CT.#1129.#1219)(6 bytes)

• Answer from FM: Sum of payment #5(by counter means) - Sales and correction sales (#CT.#1129.#1220)(6 bytes)

• Answer from FM: Sum of VAT rate #1(18%) - Sales and correction sales (#CT.#1129.#1139)(6 bytes)

• Answer from FM: Sum of VAT rate #2(10%) - Sales and correction sales (#CT.#1129.#1140)(6 bytes)

• Answer from FM: Sum of VAT rate #3(0%) - Sales and correction sales (#CT.#1129.#1143)(6 bytes)

• Answer from FM: Sum of VAT rate #4(NO VAT) - Sales and correction sales (#CT.#1129.#1183)(6 bytes)

• Answer from FM: Sum of VAT rate #5(18/118) - Sales and correction sales (#CT.#1129.#1141)(6 bytes)

• Answer from FM: Sum of VAT rate #6(10/110) - Sales and correction sales (#CT.#1129.#1142)(6 bytes)

• Answer from FM: Operations quantity – Return Sales and correction sales (#CT.#1130.#1135)(4 bytes)

• Answer from FM: Sum of payments - Return Sales and correction sales (#CT.#1130.#1201)(6 bytes)

• Answer from FM: Sum of payment #1(by cash) - Return Sales and correction return sales (#CT.#1130.#1136)(6 bytes)

• Answer from FM: Sum of payment #2(by electronic) - Return Sales and correction return sales (#CT.#1130.#1138)(6 bytes)

• Answer from FM: Sum of payment #3(in advance) - Return Sales and correction return sales (#CT.#1130.#1218)(6 bytes)

• Answer from FM: Sum of payment #4(for posterior) - Return Sales and correction return sales (#CT.#1130.#1219)(6 bytes)

• Answer from FM: Sum of payment #5(by counter means) - Return Sales and correction return sales (#CT.#1130.#1220)(6 bytes)

• Answer from FM: Sum of VAT rate #1(18%) - Return Sales and correction return sales (#CT.#1130.#1139)(6 bytes)

• Answer from FM: Sum of VAT rate #2(10%) - Return Sales and correction return sales (#CT.#1130.#1140)(6 bytes)

• Answer from FM: Sum of VAT rate #3(0%) - Return Sales and correction return sales (#CT.#1130.#1143)(6 bytes)

• Answer from FM: Sum of VAT rate #4(NO VAT) - Return Sales and correction return sales (#CT.#1130.#1183)(6 bytes)

• Answer from FM: Sum of VAT rate #5(18/118) - Return Sales and correction return sales (#CT.#1130.#1141)(6 bytes)

• Answer from FM: Sum of VAT rate #6(10/110) - Return Sales and correction return sales (#CT.#1130.#1142)(6 bytes)

• Answer from FM: Operations quantity - Purchases and correction purchases (#CT.#1131.#1135)(4 bytes)

• Answer from FM: Sum of payments - Purchases and correction purchases (#CT.#1131.#1201)(6 bytes)

• Answer from FM: Sum of payment #1(by cash) - Purchases and correction purchases (#CT.#1131.#1136)(6 bytes)

• Answer from FM: Sum of payment #2(by electronic) - Purchases and correction purchases (#CT.#1131.#1138)(6 bytes)

• Answer from FM: Sum of payment #3(in advance) - Purchases and correction purchases (#CT.#1131.#1218)(6 bytes)

• Answer from FM: Sum of payment #4(for posterior) - Purchases and correction purchases (#CT.#1131.#1219)(6 bytes)

• Answer from FM: Sum of payment #5(by counter means) - Purchases and correction purchases (#CT.#1131.#1220)(6 bytes)

• Answer from FM: Sum of VAT rate #1(18%) - Purchases and correction purchases (#CT.#1131.#1139)(6 bytes)

• Answer from FM: Sum of VAT rate #2(10%) - Purchases and correction purchases (#CT.#1131.#1140)(6 bytes)

• Answer from FM: Sum of VAT rate #3(0%) - Purchases and correction purchases (#CT.#1131.#1143)(6 bytes)

• Answer from FM: Sum of VAT rate #4(NO VAT) - Purchases and correction purchases (#CT.#1131.#1183)(6 bytes)

• Answer from FM: Sum of VAT rate #5(18/118) - Purchases and correction purchases (#CT.#1131.#1141)(6 bytes)

• Answer from FM: Sum of VAT rate #6(10/110) - Purchases and correction purchases (#CT.#1131.#1142)(6 bytes)

• Answer from FM: Operations quantity – Return Purchases and correction purchases (#CT.#1132.#1135)(4 bytes)

• Answer from FM: Sum of payments - Return Purchases and correction purchases (#CT.#1132.#1201)(6 bytes)

• Answer from FM: Sum of payment #1(by cash) - Return Purchases and correction return purchases (#CT.#1132.#1136)(6 bytes)

• Answer from FM: Sum of payment #2(by electronic) - Return Purchases and correction return purchases (#CT.#1132.#1138)(6 bytes)

• Answer from FM: Sum of payment #3(in advance) - Return Purchases and correction return purchases (#CT.#1132.#1218)(6 bytes)

• Answer from FM: Sum of payment #4(for posterior) - Return Purchases and correction return purchases (#CT.#1132.#1219)(6 bytes)

• Answer from FM: Sum of payment #5(by counter means) - Return Purchases and correction return purchases (#CT.#1132.#1220)(6 bytes)

• Answer from FM: Sum of VAT rate #1(18%) - Return Purchases and correction return purchases (#CT.#1132.#1139)(6 bytes)

• Answer from FM: Sum of VAT rate #2(10%) - Return Purchases and correction return purchases (#CT.#1132.#1140)(6 bytes)

• Answer from FM: Sum of VAT rate #3(0%) - Return Purchases and correction return purchases (#CT.#1132.#1143)(6 bytes)

• Answer from FM: Sum of VAT rate #4(NO VAT) - Return Purchases and correction return purchases (#CT.#1132.#1183)(6 bytes)

• Answer from FM: Sum of VAT rate #5(18/118) - Return Purchases and correction return purchases (#CT.#1132.#1141)(6 bytes)

• Answer from FM: Sum of VAT rate #6(10/110) - Return Purchases and correction return purchases (#CT.#1132.#1142)(6 bytes)

• Answer from FM: Quantity of Correction Checks(#CT.#1133.#1144)(4 bytes)

• Answer from FM: Quantity of Correction Checks - Sales(#CT.#1133.#1145.#1135)(4 bytes)

• Answer from FM: Total of Correction Checks - Sales(#CT.#1133.#1145.#1201)(6 bytes)

• Answer from FM: Quantity of Correction Checks – Return Sales(#CT.#1133.#1232.#1135)(4 bytes)

• Answer from FM: Total of Correction Checks - Return Sales(#CT.#1133.#1232.#1201)(6 bytes)

• Answer from FM: Quantity of Correction Checks - Purchases(#CT.#1133.#1146.#1135)(4 bytes)

• Answer from FM: Total of Correction Checks - Purchases(#CT.#1133.#1146.#1201)(6 bytes)

• Answer from FM: Quantity of Correction Checks – Return Purchases(#CT.#1133.#1233.#1135)(4 bytes)

• Answer from FM: Total of Correction Checks - Return Purchases(#CT.#1133.#1233.#1201)(6 bytes)

## C1H: FM - OPERATIONS COUNTERS REQUEST(fm command 37h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | X |
| FUSION V4.01.XX | N/A | - | X |

Command: C1H. Message length: 6 bytes.

• Operator Password (4 bytes)

• Counters Type (1 byte)

* 0=current session(#1194)
* 1=fn counter(#1157)

Answer: C1H. Message Length: 46 bytes

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: Session number(2 bytes)

• Answer from FM: Quantity of Checks and Correction checks(#CT.#1134)(4 bytes)

• Answer from FM: Quantity of Checks and Correction checks - Sales(#CT.#1129.#1135)(4 bytes)

• Answer from FM: Quantity of Checks and Correction checks – Return Sales(#CT.#1130.#1135)(4 bytes)

• Answer from FM: Quantity of Checks and Correction checks - Purchases(#CT.#1131.#1135)(4 bytes)

• Answer from FM: Quantity of Checks and Correction checks – Return Purchases(#CT.#1132.#1135)(4 bytes)

• Answer from FM: Quantity of Correction checks(#CT.#1133.#1144)(4 bytes)

• Answer from FM: Quantity of Correction checks - Sales(#CT. #1133.#1145.#1135)(4 bytes)

• Answer from FM: Quantity of Correction checks – Return Sales(#CT. #1133.#1232.#1135)(4 bytes)

• Answer from FM: Quantity of Correction checks - Purchases(#CT. #1133.#1145.#1135)(4 bytes)

• Answer from FM: Quantity of Correction checks - Return Purchases(#CT. #1133.#1233.#1135)(4 bytes)

## C2H: FM - SESSION COUNTERS BY TYPE REQUEST(fm command 38h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | X |
| FUSION V4.01.XX | N/A | - | X |

Command: C2H. Message length: 7 bytes.

• Operator Password (4 bytes)

• Counters Type (1 byte)

* 0=current session(#1194)
* 1=fn counter(#1157)

• Operations Type (1 byte)

* 1=Sales and correction sales checks(OT #1129) , correction sales checks (OTC #1145)
* 2=Return Sales and correction return sales checks(OT #1130) , correction return sales checks (OTC #1232)
* 3=Purchases and correction purchases checks(OT #1131), correction purchases checks(OTC #1146)
* 4=Return Purchases and correction return purchases checks(OT #1132), correction return purchases checks(OTC #1233)

Answer: C2H. Message Length: 90 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: Operations quantity(#CT.#OT.#1135)(4 bytes)

• Answer from FM: Sum of payments(#CT.#OT.#1201)(6 bytes)

• Answer from FM: Sum of payment #1(by cash)(#CT.#OT.#1136)(6 bytes)

• Answer from FM: Sum of payment #2(by electronic)(#CT.#OT.#1138)(6 bytes)

• Answer from FM: Sum of payment #3(in advance)(#CT.#OT.#1218)(6 bytes)

• Answer from FM: Sum of payment #4(for posterior)(#CT.#OT.#1219)(6 bytes)

• Answer from FM: Sum of payment #5(by counter means)(#CT.#OT.#1220)(6 bytes)

• Answer from FM: Sum of VAT rate #1(18%)(#CT.#OT.#1139)(6 bytes)

• Answer from FM: Sum of VAT rate #2(10%)(#CT.#OT.#1140)(6 bytes)

• Answer from FM: Sum of VAT rate #3(0%)(#CT.#OT.#1143)(6 bytes)

• Answer from FM: Sum of VAT rate #4(NO VAT)(#CT.#OT.#1183)(6 bytes)

• Answer from FM: Sum of VAT rate #5(18/118)(#CT.#OT.#1141)(6 bytes)

• Answer from FM: Sum of VAT rate #6(10/110)(#CT.#OT.#1142)(6 bytes)

• Answer from FM: Quantity of Correction Checks(#CT.#1133.#OTC.#1135)(4 bytes)

• Answer from FM: Total of Correction Checks(#CT. #1133.#OTC.#1201)(6 bytes)

## C3H: FM - FORMAT REQUEST(fm command 3Ah)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | X |
| FUSION V4.01.XX | N/A | - | X |

Command: C3H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: C3H. Message Length: 6 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Used FFD version code (1 byte)

0 – if FN is not activated

1 – FN is in FFD 1.0 mode

3 – FN 1.1 is in FFD 1.1 mode (FFD formats code is equal to 3)

• Possible FFD version code (1 byte)

* For FN 1.1 it has value 3

## C4H: FM - REMAINED VALIDITY PERIOD REQUEST(fm command 3Bh)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | X |
| FUSION V4.01.XX | N/A | - | X |

Command: C4H. Message length: 10 bytes.

• Operator Password (4 bytes)

• Date+Time(YMDhm)(5 bytes)

Answer: C4H. Message Length: 6 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Quantity of days remained (2 bytes)

## C5H: FM - FREE MEMORY RESOURCE REQUEST(fm command 3Dh)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | X |
| FUSION V4.01.XX | N/A | - | X |

Command: C5H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: C5H. Message Length: 12 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• 5 years storage resource remained (4 bytes)

• 30 days storage resource remained (4 bytes)

## C6H: FM – COUNTERS OF NOT TRANSMITTED DOCS(fm command 39h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | X |
| FUSION V4.01.XX | N/A | - | X |

Command: C6H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: C6H. Message Length: 48 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ...99

• Answer from FM: Quantity of Not Transmitted Checks and Correction Checks(#1158.#1144)(4 bytes)

• Answer from FM: Quantity of Not Transmitted Checks and Correction Checks - Sales(#1158.#1145.#1135)(4 bytes)

• Answer from FM: Total of Not Transmitted Checks and Correction Checks - Sales(#1158.#1145.#1201)(6 bytes)

• Answer from FM: Quantity of Not Transmitted Checks and Correction Checks – Return Sales(#1158.#1232.#1135)(4 bytes)

• Answer from FM: Total of Not Transmitted Checks and Correction Checks - Return Sales(#1158.#1232.#1201)(6 bytes)

• Answer from FM: Quantity of Not Transmitted Checks and Correction Checks - Purchases(#1158.#1146.#1135)(4 bytes)

• Answer from FM: Total of Not Transmitted Checks and Correction Checks - Purchases(#1158.#1146.#1201)(6 bytes)

• Answer from FM: Quantity of Not Transmitted Checks and Correction Checks – Return Purchases(#1158.#1233.#1135)(4 bytes)

• Answer from FM: Total of Not Transmitted Checks and Correction Checks - Return Purchases(#1158.#1233.#1201)(6 bytes)

## C7H: FM - TOTAL DATA SIZE(fm command a7h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | X |
| FUSION V4.01.XX | N/A | - | X |

Command: C7H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: C7H. Message Length: 8 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Total data size (4 bytes)

## C8H: FM – GET REGISTRATION document TVL(fm command 47h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: C8H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: C8H. Message Length: 4+size of “Answer from FM: TLV(STLV) Fiscal document data” field.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: TLV(STLV) Fiscal document data (X bytes)

The command is intended for receiving all the data from the report about ECR registration or report about ECR parameters change. Before execution of this command, E9h command “Request for FN fiscalization parameter” with the value FFFFh as a second parameter must be performed. In the opposite case, the command returns 2408 error code – no requested data.

C8h command should be sent till the moment when FN returns 2408 response code - no requested data.

In each FN response to C8h command there is only one TLV field or higher level STLV.

## CFH: FM – FIND DOCUMENT BY NUMBER(fm command 50h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | X |
| FUSION V4.01.XX | N/A | - | X |

Command: CFH. Message length: 9 bytes.

• Operator Password (4 bytes)

• Document number(4 bytes)

Answer: CFH. Message Length: 109+size of “Answer TLV(STLV) Fiscal document data, first 10 sale line” field.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: Format flag(1 byte)

* 0=format 40h
* 1=format AFS

• Answer from FM: tag 1192 present(1 byte)

* 0=not present
* 1=present

• Answer from FM: Document type(1 byte)

• Answer from FM: Date+time(YMDhm) (5 bytes)

• Answer from FM: Document number(4 bytes)

• Answer from FM: Document sign(4 bytes)

• Answer from FM: Operation sum(5 bytes)

• Answer from FM: Operation type(1 byte)

• Answer from FM: Archive Fiscal Sign(12 bytes)

• Answer from FM: Document type(1 byte)

• Answer from FM: Sum of payment #1(by cash)(5 bytes)

• Answer from FM: Sum of payment #2(by electronic)(5 bytes)

• Answer from FM: Sum of payment #3(in advance)(5 bytes)

• Answer from FM: Sum of payment #4(for posterior)(5 bytes)

• Answer from FM: Sum of payment #5(by counter means)(5 bytes)

• Answer from FM: Sum of VAT rate #1(18%)(5 bytes)

• Answer from FM: Sum of VAT rate #2(10%)(5 bytes)

• Answer from FM: Sum of VAT rate #3(0%)(5 bytes)

• Answer from FM: Sum of VAT rate #4(NO VAT)(5 bytes)

• Answer from FM: Sum of VAT rate #5(18/118)(5 bytes)

• Answer from FM: Sum of VAT rate #6(10/110)(5 bytes)

• Answer from FM: Tag 1192 (16 bytes)

• Answer from FM: TLV(STLV) Fiscal document data, first 10 sale line(X bytes)

## D6H: Check correction payment(OFD PROT 1.0)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: D6H. Message length: 16 bytes.

• Operator Password (4 bytes)

• Document Type (1 byte):

0 - sale;

2 - purchase;

• Sum of cash (5 bytes) 0000000000... 9999999999

• Sum of no cash (5 bytes) 0000000000... 9999999999

Answer: D6H. Message length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## D6H: OPEN correction TICKET(OFD PROT 1.05 and LATER)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: D6H. Message length: variable number of bytes.

• (1)Operator Password (4 bytes)

• (2)Flags (2 bytes)

Bit 1: print(0)/no print(1)

Bit 2: don’t save on file(0)/save on file(1)

Bit 0, 3..15: must be 0

• (3)Document Type (1 byte):

0 – correction of sale;

1 - correction of sale return;

2 – correction of purchase;

3 – correction of purchase return;

• (4)Tax code (1 byte):

0 – AUTOMATIC MODE;

1 - traditional;

2 – light, income;

4 – light, income minus expenses;

8 – Single tax for input earnings;

16 – Single agricultural tax;

32 – Patent taxation system;

• (5)Correction type(#1174.#1173)(1 byte):

0 - independent;

1 - prescription;

• (6)Reason for correction(#1174.#1177)(LENGTH\_PREFIXED\_TEXT of 1 to 256 bytes)

• (7)Date of the reason of correction(#1174.#1178)(YMD, 3 bytes)

• (8)Doc Number of the reason of correction(#1174.#1179)(LENGTH\_PREFIXED\_TEXT of 1 to 32 bytes if “Correction type”=prescrption, else must be LENGTH\_PREFIXED\_TEXT of 0 bytes)

Answer: D6H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## D7H: Get Last Error

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: D7H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: D7H. Message length: 46 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Last error code (2 bytes)

• Internal Error Text (40 bytes ASCII)

## D8H: Send “OFD data”

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: D8H. Message length: 9+size of “<OFD data> value” field.

• Operator Password (4 bytes)

• “OFD data” Id (2 byte): DATA id, must be greater than 1000

• Operation type (1 bytes): must be 0

• Length of “OFD data” (1 bytes): 01..255

• <OFD data> value (X bytes)

Answer: D8H. Message length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

“OFD Data” available:

|  |  |  |  |
| --- | --- | --- | --- |
| ***ID*** | ***Name*** | ***Format*** | ***Position*** |
| ***1008*** | ***Purchaser phone or email address*** | ***Text*** | ***TC, SE*** |

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: D8H. Message length: 10+size of “<OFD data> value” field.

• (1)Operator Password (4 bytes)

• (2) “OFD data” Id (2 byte): DATA id, must be greater than 1000

• (3)Operation type (1 bytes): must be 0

• (4)Length of “OFD data” (2 bytes): 0...256. If length=0, then OFD data previously sent is deleted.

• (5)<OFD data> value (”Length of “OFD data”” bytes)

Answer: D8H. Message length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

(\*)it is possible to concatenate multiple <OFD data> in one single d8h command.

“OFD Data” available:

|  |  |  |  |
| --- | --- | --- | --- |
| ***ID*** | ***Name*** | ***Format*** | ***Position*** |
| ***0*** | ***Delete all OFD data sent by PC*** | ***-*** | ***SE, TE*** |
| ***1005*** | ***Money transfer operator address*** | ***Text {S}, 256 chars*** | ***SE, TE*** |
| ***1008*** | ***Purchaser phone or email address*** | ***Text +{D} or {S}@{S}, 64 chars*** | ***TE*** |
| ***1016*** | ***Money transfer operator TIN*** | ***Text 10 or 12 chars*** | ***SE, TE*** |
| ***1026*** | ***Money transfer operator name*** | ***Text {S}, 64 chars*** | ***SE, TE*** |
| ***1044*** | ***Paying agent operation*** | ***Text {S}, 24 chars*** | ***SE, TE*** |
| ***1057*** | ***Flag of agent*** | ***Byte*** | ***TE*** |
| ***1073*** | ***Paying agent phone*** | ***Text +{D}, 19 chars*** | ***SE, TE, R*** |
| ***1074*** | ***Payments receiving operator phone*** | ***Text +{D}, 19 chars*** | ***SE, TE, R*** |
| ***1075*** | ***Money transfer operator phone*** | ***Text +{D}, 19 chars*** | ***SE, TE, R*** |
| ***1171*** | ***Supplier phone*** | ***Text +{D}, 19 chars*** | ***SE, TE, R*** |
| ***1222*** | ***Flag of agent by payment subject*** | ***Byte*** | ***SE*** |
| ***1225*** | ***Supplier Name*** | ***Text {S}, 256 chars*** | ***SE*** |
| ***1226*** | ***Supplier TIN*** | ***Text 10 or 12 chars*** | ***SE*** |

***(\*)SE-> applies to sale line, TE->applies to ticket end, R can be repeated***

## D9H: Open Day

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: D9H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: D9H. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: D9H. Message length: 7 bytes.

• Operator Password (4 bytes)

• Flags (2 bytes)

Bit 1: print(0)/no print(1)

Bit 2: don’t save on file(0)/save on file(1)

Bit 0, 3..15: must be 0

Answer: D9H. Message Length: variable number of bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Session number (2 bytes)

• Document number (4 bytes)

• Document fiscal sign (4 bytes)

• Cashier name (LENGTH\_PREFIXED\_TEXT of 0 to 64 bytes)

## DAH – OPEN NOT FISCAL DOCUMENT

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: DAH. Message length: 7 bytes.

• Operator Password (4 bytes)

• Open ticket flags(2 bytes):

Bit 0: reserved, must be 0

Bit 1: don’t print cashier

Bit 2: don’t print ECR S/N

Bit 3: reserved, must be 0

Bit 4: reserved, must be 0

Bit 5: don’t print header

Bit 6: don’t print date/time

Bit 7..15: reserved, must be 0

Answer: DAH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## DBH – PRINT TEXT

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: DBH. Message length: 7+size of “Text” field.

• Operator Password (4 bytes)

• Print flag(2 bytes):

bit 1: double width;

bit 2: 1=automatic new line at space, 0=automatic new line at line full;

bit 3: half width;

bit 4: double height;

bit 5: border;

bit 6: half height;

bit 11: bold;

bit 12: italic;

• Text (1000 bytes).

Text can be any char with code>’ ‘(0x20)

Chars 01..05 change the font of the following bytes

Answer: DBH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

SAMPLES:

* Print one line: 3F420F00 0400 3031323334353637383930313233343536373839303132333435363738393031323334353637383930
* Print one line, double height: 3F420F00 1400 3031323334353637383930313233343536373839303132333435363738393031323334353637383930
* Print one line, border: 3F420F00 2400 3031323334353637383930313233343536373839303132333435363738393031323334353637383930
* Print one line, half height:3F420F00 4400 3031323334353637383930313233343536373839303132333435363738393031323334353637383930
* Print one line, double height+border: 3F420F00 3400 3031323334353637383930313233343536373839303132333435363738393031323334353637383930
* Print one line, half height+border: 3F420F00 6400 3031323334353637383930313233343536373839303132333435363738393031323334353637383930
* Print one line, bold: 3F420F00 0408 3031323334353637383930313233343536373839303132333435363738393031323334353637383930
* Print one line, italic: 3F420F00 0410 3031323334353637383930313233343536373839303132333435363738393031323334353637383930
* Print one line, double width: 3F420F00 0600 3031323334353637383930313233343536373839
* Print one line, half width: 3F420F00 0C00 3031323334353637383930313233343536373839303132333435363738393031323334353637383930313233
* one line, use font 1(minimum width) 3F420F00 0400 013031323334
* one line, use font 2 3F420F00 0400 023031323334
* one line, use font 3 3F420F00 0400 033031323334
* one line, use font 4 3F420F00 0400 043031323334
* one line, use font 5(maximum width) 3F420F00 0400 053031323334
* print one line, use font 5(maximum width) for first char font 1: 3F420F00 0400 05300131323334
* print one line, smallest font, maximum number of chars/line(pure font size): 3F420F00 0400 01303132333435363738393031323334353637383930313233343536373839303132333435363738393031323334353637383930313233343536
* print one line, biggest font, minimum number of chars/line(pure font size): 3F420F00 0400 05303132333435363738393031323334353637383930313233343536373839303132333435

## DCH – CUT PAPER

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: DCH. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: DCH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## DDH – PRINT ICON

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: DDH. Message length: 12 bytes.

• Operator Password (4 bytes)

• Icon number to print(1 bytes)(1..25)

• Window height(2 bytes)

• Start X(2 bytes)(must be multiple of 8)

• Start Y(2 bytes)

Answer: DDH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

Sample:

Print icon #10, in a window with height 200, from point(0, 10):

3F420F00 0A C800 0000 0A00

| |

| PAPER |

| |

+-----------------------+ <----+

| | |

| Start(X,Y) | |

| +----------+ | |

| | | | | window height

| | | | |

| | icon | | |

| | | | |

| | | | |

| | | | |

| +----------+ | |

| | |

+-----------------------+ <---+

| |

| |

## DEH – PRINT BARCODE

-----------------------------------------

Case of **FAST BARCODE LIBRARY**

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: DEH. Message length: 14+size of “Text” field.

• Operator Password (4 bytes)

• Type of library(1 byte): 0=fast barcode library

• Height(2 bytes)

• Scale(2 bytes)

• Margin(2 byte): 0=left, 1=center, 2=right

• Flags(2 bytes)

Bit 0..7 type of barcode:

1: EAN

2: UPC-A or UPC-E

3: Interleaved 2 of 5

4: Code 39

5: Code 128(a,b,c autoselection)

6: Code 128C(compact form for digits)

7: Code 128B, full printable ascii

8: Raw 128 code

Bit 8: No ascii

Bit 9: No checksum

Bit 12: print text double height

Bit 13: no header nor footer

• Text(X bytes)

Answer: DEH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

Sample:

* Print EAN code(1), width 3, scale 3, margin: center, code 4567890: 3F420F00 00 0300 0300 0100 0100 34353637383930
* Print UPC code(2), width 3, scale 1, margin: left, code 45678901234: 3F420F00 00 0300 0100 0000 0200 3435363738393031323334
* Print Interleaved 2 of 5 code(3), width 4, scale 2, margin: right, code 456789012: 3F420F00 00 0400 0200 0200 0300 343536373839303132
* Print Code39 code(4), width 3, scale 1, margin: left, code 678901: 3F420F00 00 0300 0100 0000 0400 363738393031
* Print Code39 code(4) no header, width 3, scale 1, margin: left, code 678901: 3F420F00 00 0300 0100 0000 0420 363738393031
* Print Code39 code(4) with no header, width 3, scale 1, margin: left, code 678901: 3F420F00 00 0300 0100 0000 0420 363738393031
* Print Code39 code(4) with double height text, width 3, scale 1, margin: left, code 678901: 3F420F00 00 0300 0100 0000 0410 363738393031
* Print Code39 code(4) with no text, width 3, scale 1, margin: left, code 678901: 3F420F00 00 0300 0100 0000 0401 363738393031
* Print Code128 code(5), width 3, scale 3, margin: center, code 678901: 3F420F00 00 0300 0300 0000 0500 363738393031

-----------------------------------------

Case of **EXTENDED BARCODE LIBRARY**

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | - | - |

Command: DEH. Message length: 12+size of “Text” field.

• Operator Password (4 bytes)

• Type of library(1 byte): 1=extended barcode library

• Code(2 bytes):

6: QRCODE

8: PDF417

• Scale(2 bytes)

• Flags(2 bytes):

Bit 0: type

Bit 1: code

Bit 2: checksum

• Text(X bytes)

Answer: DEH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

Sample:

* QR-Code, Scale=5, flags=1, code 4567890: 3F420F00 01 0600 0500 0100 34353637383930
* QR-Code with text code, Scale=5, flags=0, code 4567890: 3F420F00 01 0600 0500 0000 34353637383930
* QR-Code with text header, Scale=5, flags=2, code 4567890: 3F420F00 01 0600 0500 0200 34353637383930
* PDF417, Scale=2, flags=1, code 4567890: 3F420F00 01 0800 0200 0100 34353637383930

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Case of **COMPACT QR-CODE LIBRARY**

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: DEH. Message length: 8+size of “Text” field.

• Operator Password (4 bytes)

• Type of library(1 byte): 2=compact QR\_CODE library

• Scale(2 bytes)

• Text(X bytes)

Answer: DEH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

Sample:

* Scale=5, code 4567890: 3F420F00 02 0500 34353637383930

## DFH – CLOSE NOT FISCAL DOCUMENT

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: DFH. Message length: 7 bytes.

• Operator Password (4 bytes)

• Close ticket flags(2 bytes):

Bit 0: reserved, must be 0

Bit 1: don’t print ECR S/N

Bit 2: don’t cut paper

Bit 3..15: reserved, must be 0

Answer: DFH. Message Length: 4 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

## E0H: FM - status(fm command 30h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: E0H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: E0H. Message Length: 34 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: state of life cycle phase(1 byte)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Bit 3 | Bit 2 | Bit 1 | Bit 0 | FN usage stage (state code) |
| 0 | 0 | 0 | 1 | FN readiness to registration report forming (1) |
| 0 | 0 | 1 | 1 | FN exploitation with forming of fiscal documents about payments, reports about registration parameters change (except the report about registration parameters change due to FN substitution) and report about FN closing.(3) |
| 0 | 1 | 1 | 1 | Transmission of fiscal documents to FDO without forming of fiscal documents. (7) |
| 1 | 1 | 1 | 1 | Providing for possibility of fiscal data reading, which are stored in FN memory. (15) |

• Answer from FM: recent document(1 byte)

* 00h – there is no opened document
* 01h – report about ECR registration
* 02h – report about session opening
* 04h – sales check
* 08h – report about session closing
* 10h – report about fiscal mode closing
* 11h – Strict accounting form
* 12h – Report about ECR registration parameters change related to FN substitution
* 13h – Report about ECR registration parameters change
* 14h – Correction check
* 15h – Correction strict accounting form
* 17h – Report about current payments state

• Answer from FM: document data(1 byte)

* 0 – no document data
* 1 – document data are received

• Answer from FM: session state(1 byte)

* 0 – session is closed
* 1 – session is opened

• Answer from FM: flags and warnings(1 byte)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Bit 7 | Bit 6 | Bit 5 | Bit 4 | Bit 3 | Bit 2 | Bit 1 | Bit 0 | Description |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | Urgent replacement of FN (will be expired within 3 days) |
| 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | FN resource exhaustion (will be expired within 30 days) |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | FN memory overflow (FN archive is filled up to 99%) |
| 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | FDO answer waiting time is exceeded |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | FN critical error |
| 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | Format-logical control  Message from FDO (the flag is transmitted inside FDO confirmation) |
| 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | ECR Setting up is required  (the flag is transmitted inside FDO confirmation) |
| 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | FDO is cancelled  (the flag is transmitted inside FDO confirmation) |

• Answer from FM: date and time(YMDhm)(5 bytes)

• Answer from FM: FM number(16 bytes)

• Answer from FM: last FD document(4 bytes)

## E1H: FM - serial number(fm command 31h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: E1H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: E1H. Message Length: 20.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: FM number (16 bytes)

## E2H: FM - expiry date(fm command 32h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: E2H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: E2H. Message Length: 9 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: FM expiration date(YMD)(3 bytes)

• Answer from FM: available registrations (1 byte, signed)

• Answer from FM: performed registrations (1 byte, signed)

## E3H: FM - version(fm command 33h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: E3H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: E3H. Message Length: 21 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: FM FW version string(16 bytes)

• Answer from FM: FW type(1 byte)

* 0 – debug version
* 1 – production run version

## E4H: FM - ofd status(fm command 20h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: E4H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: E4H. Message Length: 17 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: data exchange status(1 byte)

* Bit 0 – transport connection is set
* Bit 1 – there is a message for transmission to FDO
* Bit 2 – waiting for response message (acknowledge) from FDO
* Bit 3 – there is a command from FDO
* Bit 4 – connection settings with FDO are changed
* Bit 5 – Waiting for response on the command from FDO

• Answer from FM: state of message reading from fdo(1 byte). Messages reading for FDO is started (1 – yes, 0 – no)

• Answer from FM: quantity of message for transmission(2 bytes)

• Answer from FM: document number for fdo, which is first in queue(4 bytes)

• Answer from FM: document date for fdo, which is first in queue(YMDhm)(5 byte)

## E5H: FM - get fiscal document by number(fm command 40h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: E5H. Message length: 9 bytes.

• Operator Password (4 bytes)

• Fiscal document number (4 bytes)

Answer: E5H. Message Length: 6+size of “Answer from FM: fiscal document data” field.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: document type(1 byte)

• Answer from FM: if ack from fdo is received(1 byte) (1=acked by server)

• Answer from FM: fiscal document data(X byte)

Document type – Report about ECR registration parameters change for FN 1.0

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Length** |
| Date and time | DATE\_TIME | 5 |
| FD number | Uint32, LE | 4 |
| Document Fiscal sign | Uint32, LE | 4 |
| TIN | ASCII | 12 |
| ECR registration number | ASCII | 20 |
| Taxation code | Byte | 1 |
| Working mode | Byte | 1 |
| Re-registration reason code | Byte | 1 |

Document type – Report about ECR registration parameters change for FN 1.1

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Length** |
| Date and time | DATE\_TIME | 5 |
| FD number | Uint32, LE | 4 |
| Document Fiscal sign | Uint32, LE | 4 |
| TIN | ASCII | 12 |
| ECR registration number | ASCII | 20 |
| Taxation code | Byte | 1 |
| Working mode | Byte | 1 |
| Re-registration reason code | Byte | 1 |
| Detailed flags of ECR work | Byte | 1 |
| FDO TIN | ASCII | 12 |
| ECR reregistration reason code (corresponds to field code TLV 1205) | Uint32, LE | 4 |

Document type – Sales check or Strict accounting form

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Length** |
| Date and time | DATE\_TIME | 5 |
| FD number | Uint32, LE | 4 |
| Document Fiscal sign | Uint32, LE | 4 |
| Operation type | Byte | 1 |
| Operation sum | Uint40, LE | 5 |

5.1.6 Document type – Session opening

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Length** |
| Date and time | DATE\_TIME | 5 |
| FD number | Uint32, LE | 4 |
| Document Fiscal sign | Uint32, LE | 4 |
| Session number | Uint16, LE | 2 |

Document type – Session closing

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Length** |
| Date and time | DATE\_TIME | 5 |
| FD number | Uint32, LE | 4 |
| Document Fiscal sign | Uint32, LE | 4 |
| Session number | Uint16, LE | 2 |

Document type – FN closing

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Length** |
| Date and time | DATE\_TIME | 5 |
| FD number | Uint32, LE | 4 |
| Document Fiscal sign | Uint32, LE | 4 |
| TIN | ASCII | 12 |
| ECR registration number | ASCII | 20 |

Document type – Report about payments state

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Length** |
| Date and time | DATE\_TIME | 5 |
| FD number | Uint32, LE | 4 |
| Document Fiscal sign | Uint32, LE | 4 |
| Quantity of not confirmed documents | Uint32, LE | 4 |
| Date of first not confirmed document | DATE\_TIME | 5 (3?) |

Acknowledge format when transmitted from FN Archive

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Length** |
| Date and time | DATE\_TIME | 5 |
| FDO fiscal sign | DATA | 18 |
| Fiscal Document number | Uint32, LE | 4 |

## E6H: FM - get fiscal document ack from server(fm command 41h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: E6H. Message length: 9 bytes.

• Operator Password (4 bytes)

• Fiscal document number (4 bytes)

Answer: E6H. Message Length: 4+size of “Answer from FM: Acknowledge about document receiving from FDO” field.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: Acknowledge about document receiving from FDO (X bytes)

## E7H: FM - get quantity of not acked doc from server(fm command 42h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: E7H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: E7H. Message Length: 6 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: Quantity of not confirmed FD (2 bytes)

## E8H: FM - get fiscalization totals(fm command 43h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | - |
| FUSION V4.01.XX | N/A | X | - |

Command: E8H. Message length: 6 bytes.

• Operator Password (4 bytes)

• Number of registration (1 byte)

Answer: E8H. Message Length: 52 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: date and time(YMDhm)(5 bytes)

• Answer from FM: TIN(12 bytes)

• Answer from FM: ECR reg number(20 bytes)

• Answer from FM: taxation code(see description below for filed format)(1 byte)

• Answer from FM: working mode(see description below for filed format) (1 byte)

• Answer from FM: reregistration reason(#1101) (1 byte)

|  |  |  |
| --- | --- | --- |
| **Code** | **Description** | **Comment** |
| 1 | FN substitution | For ECR registration parameters change related to FN substitution, this field will be set by FN automatically |
| 2 | FDO substitution |  |
| 3 | User data substitution |  |
| 4 | ECR parameters substitution |  |

• Answer from FM: fiscal doc number(4 bytes)

• Answer from FM: fiscal sign(4 bytes)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | X |
| FUSION V4.01.XX | N/A | - | X |

Command: E8H. Message length: 6 bytes.

• Operator Password (4 bytes)

• Number of registration (1 byte)

Answer: E8H. Message Length: 68 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: date and time(YMDhm)(5 bytes)

• Answer from FM: TIN(12 bytes)

• Answer from FM: ECR reg number(20 bytes)

• Answer from FM: taxation code(1 byte)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Bit 5 | Bit 4 | Bit 3 | Bit 2 | Bit 1 | Bit 0 | Description |
| 0 | 0 | 0 | 0 | 0 | 1 | Traditional |
| 0 | 0 | 0 | 0 | 1 | 0 | Light, Income |
| 0 | 0 | 0 | 1 | 0 | 0 | Light, Income minus Expense |
| 0 | 0 | 1 | 0 | 0 | 0 | Single tax for imputed earnings |
| 0 | 1 | 0 | 0 | 0 | 0 | Single agricultural tax |
| 1 | 0 | 0 | 0 | 0 | 0 | Patent taxation system |

• Answer from FM: working mode(1 byte)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Bit 5 | Bit 4 | Bit 3 | Bit 2 | Bit 1 | Bit 0 | Description |
| 0 | 0 | 0 | 0 | 0 | 1 | Encoding |
| 0 | 0 | 0 | 0 | 1 | 0 | Offline mode |
| 0 | 0 | 0 | 1 | 0 | 0 | Automatic mode |
| 0 | 0 | 1 | 0 | 0 | 0 | Use in human services sphere |
| 0 | 1 | 0 | 0 | 0 | 0 | Strict Accounting Form mode (1) or Sales Checks mode (0) |
| 1 | 0 | 0 | 0 | 0 | 0 | Usage in Internet |

• Answer from FM: extra flags working mode(1 byte)

|  |  |  |
| --- | --- | --- |
| **Bit** | **Field value (flag) (0 – no, 1 – yes)** | **Corresponding TLV tag** |
| 0 | Flag of excisable goods selling | #1207 |
| 1 | Flag of gambling | #1193 |
| 2 | Flag of the lottery | #1126 |
| 3 | Flag of printer installation inside automatic device | #1221 |

• Answer from FM: OFD TIN(12 bytes)

• Answer from FM: reregistration reason(#1205)(4 bytes)

• Answer from FM: fiscal doc number(4 bytes)

• Answer from FM: fiscal sign(4 bytes)

## E9H: FM - get fiscalization STVL(fm command 44h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: E9H. Message length: 8 bytes.

• Operator Password (4 bytes)

• Number of registration (1 byte)

• TLV parameter (2 bytes)

Answer: E9H. Message Length: 4+size of “Answer from FM: TLV parameter” field.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

The command allows to get one of the parameters TLV value, which was set during fiscalization (forming registration or reregistration report).

Data is available for transmission only after successfully completed fiscalization.

Registration (reregistration) report number, for which is required to get data is transmitted as a first parameter.

If parameter “TLV parameter “ is set to FFFFh (65535), then a command gives possibility to get all TLV set at registration. For this it is required to call the command C8h till it does not return answer code 2408 – “No requested data”

• Answer from FM: TLV parameter (X bytes)

## EAH: FM - get fiscal document(fm command 45h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: EAH. Message length: 9 bytes.

• Operator Password (4 bytes)

• Fiscal document number (4 bytes)

Answer: EAH. Message length: 8 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: Fiscal document type (2 bytes)

| **FD form code** | **Full FD name** |
| --- | --- |
| 1 | Report about registration |
| 11 | Report about registration parameters change |
| 2 | Report about session opening |
| 21 | Report about current payments state |
| 3 | Sales check |
| 31 | Correction sales check |
| 4 | Strict accounting form |
| 41 | Correction strict accounting form |
| 5 | Report about session closing |
| 6 | Report about FN closing |
| 7 | Confirmation from operator |

• Answer from FM: Fiscal document length (2 bytes)

## EBH: FM - get fiscal document TVL(fm command 46h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: EBH. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: EBH. Message Length: 4+size of “Answer from FM: TLV(STLV) Fiscal document data” field.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: TLV(STLV) Fiscal document data (X bytes)

Notes:

The command allows to read all contents of fiscal document in TLV format, including the data received from ECR and the data formed by FN.

Command sequence:

- ECR sends EAh command with FD number, if for this document there are data in TLV format, FN returns STLV document type and its’ length in response;

- ECR sends EBh command and receives one of first level TLV, as a part of STLV. ECR sends EBh command till the moment when FN returns 2408 response code - no requested data, and it will mean that all the STLV contents has been sent to ECR.

## ECH: FM - get recent session parameters(fm command 10h)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: ECH. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: ECH. Message Length: 9 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: Session state (1 byte)

• Answer from FM: Session number (2 bytes)

• Answer from FM: Check number(2 bytes)

## F0H: Read actual date/time

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: F0H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: F0H. Message Length: 9 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Day(1 byte)

• Month(1 byte)

• Year(1 byte)

• Hour(1 byte)

• Minute(1 byte)

## F1H: Printer status

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: F1H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: F1H. Message Length: 7 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• BYTE STATUS 1

• bit 0: Cover open: 0->closed

• bit 1: Paper present: 0->paper present

• bit 2: Paper near end: 0->paper not near end

• bit 3: cutter error: 0->cutter not in error

• bit 4: Virtual paper near end: 0->paper not virtual near end

• BYTE STATUS 2

• bit 0: no fm: 0->fm present – reserved in Russia

• bit 1: 0-> day is not open, 1 -> day is open

• bit 2: date not set: 1->date set

• bit 3: fm ko: 0->fm ok – reserved in Russia

• bit 4: reset needed: 0->not needed

• bit 5: hw init jumper set: 0->not insert

• bit 6: serialized: 0->non serialized

• bit 7: idle state: 1->idle

• BYTE STATUS 3

• bit 0: the printer is printing: 0->not printing

• bit 1: printer error: 0->no error

• bit 2: learning mode: 0->no learning, NOT USED IN RUSSIA

## F3H: Receipt status

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: F3H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: F3H. Message Length: 7 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Fiscal receipt in progress (1 byte): 0 -> not in progress

• Non fiscal receipt in progress (1 byte) : 0 -> not in progress

• Fiscal receipt step (1 byte) :

0 -> not in progress

1 -> ticket open, no sale done

2 -> sale

3 -> payments

4 -> change print

5 -> fixed lines(opt)

6 -> closing executed

7 -> courtesy messages

8 -> ejection

9 -> non fiscal open

## F4H: Last receipt status

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: F4H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: F4H. Message Length: 19 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Day(1 bytes)

• Month(1 bytes)

• Year(1 bytes)

• Hour(1 bytes)

• Minute(1 bytes)

• Number of the ticket(2 bytes)

• total of the ticket(8 bytes)

## F5H: Grand totals counters status

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: F5H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: F5H. Message Length: 52 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• grand totals of sale (8 byte)

• grand totals of return sale (8 byte)

• grand totals of purchase (8 byte)

• grand totals of return purchases (8 byte)

• grand totals of sale corrections(8 byte)

• grand totals of purchase corrections(8 byte)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: F5H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: F5H. Message Length: 460 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Operations quantity(#1157.#1134)(4 bytes)

• Operations quantity – Sales and correction sales(#1157.#1129.#1135)(4 bytes)

• Sum of payments - Sales and correction sales (#1157.#1129.#1201)(8 bytes)

• Sum of payment #1(by cash) - Sales and correction sales (#1157.#1129.#1136)(8 bytes)

• Sum of payment #2(by electronic) - Sales and correction sales (#1157.#1129.#1138)(8 bytes)

• Sum of payment #3(in advance) - Sales and correction sales (#1157.#1129.#1218)(8 bytes)

• Sum of payment #4(for posterior) - Sales and correction sales (#1157.#1129.#1219)(8 bytes)

• Sum of payment #5(by counter means) - Sales and correction sales (#1157.#1129.#1220)(8 bytes)

• Sum of VAT rate #1(18%) - Sales and correction sales (#1157.#1129.#1139)(8 bytes)

• Sum of VAT rate #2(10%) - Sales and correction sales (#1157.#1129.#1140)(8 bytes)

• Sum of VAT rate #3(0%) - Sales and correction sales (#1157.#1129.#1143)(8 bytes)

• Sum of VAT rate #4(NO VAT) - Sales and correction sales (#1157.#1129.#1183)(8 bytes)

• Sum of VAT rate #5(18/118) - Sales and correction sales (#1157.#1129.#1141)(8 bytes)

• Sum of VAT rate #6(10/110) - Sales and correction sales (#1157.#1129.#1142)(8 bytes)

• Operations quantity – Return Sales and correction return sales(#1157.#1130.#1135)(4 bytes)

• Sum of payments - Return Sales and correction return sales(#1157.#1130.#1201)(8 bytes)

• Sum of payment #1(by cash) - Return Sales and correction return sales(#1157.#1130.#1136)(8 bytes)

• Sum of payment #2(by electronic) - Return Sales and correction return sales (#1157.#1130.#1138)(8 bytes)

• Sum of payment #3(in advance) - Return Sales and correction return sales (#1157.#1130.#1218)(8 bytes)

• Sum of payment #4(for posterior) - Return Sales and correction return sales (#1157.#1130.#1219)(8 bytes)

• Sum of payment #5(by counter means) - Return Sales and correction return sales (#1157.#1130.#1220)(8 bytes)

• Sum of VAT rate #1(18%) - Return Sales and correction return sales(#1157.#1130.#1139)(8 bytes)

• Sum of VAT rate #2(10%) - Return Sales and correction return sales(#1157.#1130.#1140)(8 bytes)

• Sum of VAT rate #3(0%) - Return Sales and correction return sales(#1157.#1130.#1143)(8 bytes)

• Sum of VAT rate #4(NO VAT) - Return Sales and correction return sales(#1157.#1130.#1183)(8 bytes)

• Sum of VAT rate #5(18/118) - Return Sales and correction return sales(#1157.#1130.#1141)(8 bytes)

• Sum of VAT rate #6(10/110) - Return Sales and correction return sales(#1157.#1130.#1142)(8 bytes)

• Operations quantity - Purchases and correction Purchases(#1157.#1131.#1135)(4 bytes)

• Sum of payments - Purchases and correction Purchases(#1157.#1131.#1201)(8 bytes)

• Sum of payment #1(by cash) - Purchases and correction Purchases(#1157.#1131.#1136)(8 bytes)

• Sum of payment #2(by electronic) - Purchases and correction Purchases(#1157.#1131.#1138)(8 bytes)

• Sum of payment #3(in advance) - Purchases and correction Purchases (#1157.#1131.#1218)(8 bytes)

• Sum of payment #4(for posterior) - Purchases and correction Purchases (#1157.#1131.#1219)(8 bytes)

• Sum of payment #5(by counter means) - Purchases and correction Purchases (#1157.#1131.#1220)(8 bytes)

• Sum of VAT rate #1(18%) - Purchases and correction Purchases (#1157.#1131.#1139)(8 bytes)

• Sum of VAT rate #2(10%) - Purchases and correction Purchases (#1157.#1131.#1140)(8 bytes)

• Sum of VAT rate #3(0%) - Purchases and correction Purchases (#1157.#1131.#1143)(8 bytes)

• Sum of VAT rate #4(NO VAT) - Purchases and correction Purchases (#1157.#1131.#1183)(8 bytes)

• Sum of VAT rate #5(18/118) - Purchases and correction Purchases (#1157.#1131.#1141)(8 bytes)

• Sum of VAT rate #6(10/110) - Purchases and correction Purchases (#1157.#1131.#1142)(8 bytes)

• Operations quantity – Return Purchases and correction return Purchases(#1157.#1132.#1135)(4 bytes)

• Sum of payments - Return Purchases and correction purchases(#1157.#1132.#1201)(8 bytes)

• Sum of payment #1(by cash) - Return Purchases and correction Return purchases (#1157.#1132.#1136)(8 bytes)

• Sum of payment #2(by electronic) - Return Purchases and correction Return purchases (#1157.#1132.#1138)(8 bytes)

• Sum of payment #3(in advance) - Return Purchases and correction Return purchases (#1157.#1132.#1218)(8 bytes)

• Sum of payment #4(for posterior) - Return Purchases and correction Return purchases (#1157.#1132.#1219)(8 bytes)

• Sum of payment #5(by counter means) - Return Purchases and correction Return purchases (#1157.#1132.#1220)(8 bytes)

• Sum of VAT rate #1(18%) - Return Purchases and correction Return purchases (#1157.#1132.#1139)(8 bytes)

• Sum of VAT rate #2(10%) - Return Purchases and correction Return purchases (#1157.#1132.#1140)(8 bytes)

• Sum of VAT rate #3(0%) - Return Purchases and correction Return purchases (#1157.#1132.#1143)(8 bytes)

• Sum of VAT rate #4(NO VAT) - Return Purchases and correction Return purchases (#1157.#1132.#1141)(8 bytes)

• Sum of VAT rate #5(18/118) - Return Purchases and correction Return purchases (#1157.#1132.#1142)(8 bytes)

• Sum of VAT rate #6(10/110) - Return Purchases and correction Return purchases (#1157.#1132.#1)(8 bytes)

• Quantity of Correction Checks(#1157.#1133.#1144)(4 bytes)

• Quantity of Correction Checks - Sales(#1157.#1133.#1145.#1135)(4 bytes)

• Total of Correction Checks - Sales(#1157.#1133.#1145.#1201)(8 bytes)

• Quantity of Correction Checks – Return Sales(#1157.#1133.#1232.#1135)(4 bytes)

• Total of Correction Checks - Return Sales(#1157.#1133.#1232.#1201)(8 bytes)

• Quantity of Correction Checks - Purchases(#1157.#1133.#1146.#1135)(4 bytes)

• Total of Correction Checks - Purchases(#1157.#1133.#1146.#1201)(8 bytes)

• Quantity of Correction Checks – Return Purchases(#1157.#1133.#1233.#1135)(4 bytes)

• Total of Correction Checks - Return Purchases(#1157.#1133.#1233.#1201)(8 bytes)

## F6H: Day totals counters status

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: F6H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: F6H. Message Length: 72 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• number of sale tickets(2 byte)

• grand totals of sale (8 byte)

• number of return sale tickets(2 byte)

• grand totals of return sale (8 byte)

• number of purchase tickets(2 byte)

• grand totals of purchase (8 byte)

• number of return purchases tickets(2 byte)

• grand totals of return purchases (8 byte)

• number of sale corrections tickets(2 byte)

• grand totals of sale corrections(8 byte)

• number of purchase corrections tickets(2 byte)

• grand totals of purchase corrections(8 byte)

• cash in the drawer(8 byte)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: F6H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: F6H. Message Length: 460 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Operations quantity(#1194.#1134)(4 bytes)

• Operations quantity – Sales and correction sales(#1194.#1129.#1135)(4 bytes)

• Sum of payments - Sales and correction sales (#1194.#1129.#1201)(8 bytes)

• Sum of payment #1(by cash) - Sales and correction sales (#1194.#1129.#1136)(8 bytes)

• Sum of payment #2(by electronic) - Sales and correction sales (#1194.#1129.#1138)(8 bytes)

• Sum of payment #3(in advance) - Sales and correction sales (#1194.#1129.#1218)(8 bytes)

• Sum of payment #4(for posterior) - Sales and correction sales (#1194.#1129.#1219)(8 bytes)

• Sum of payment #5(by counter means) - Sales and correction sales (#1194.#1129.#1220)(8 bytes)

• Sum of VAT rate #1(18%) - Sales and correction sales (#1194.#1129.#1139)(8 bytes)

• Sum of VAT rate #2(10%) - Sales and correction sales (#1194.#1129.#1140)(8 bytes)

• Sum of VAT rate #3(0%) - Sales and correction sales (#1194.#1129.#1143)(8 bytes)

• Sum of VAT rate #4(NO VAT) - Sales and correction sales (#1194.#1129.#1183)(8 bytes)

• Sum of VAT rate #5(18/118) - Sales and correction sales (#1194.#1129.#1141)(8 bytes)

• Sum of VAT rate #6(10/110) - Sales and correction sales (#1194.#1129.#1142)(8 bytes)

• Operations quantity – Return Sales and correction return sales (#1194.#1130.#1135)(4 bytes)

• Sum of payments - Return Sales and correction return sales (#1194.#1130.#1201)(8 bytes)

• Sum of payment #1(by cash) - Return Sales and correction return sales (#1194.#1130.#1136)(8 bytes)

• Sum of payment #2(by electronic) - Return Sales and correction return sales (#1194.#1130.#1138)(8 bytes)

• Sum of payment #3(in advance) - Return Sales and correction return sales (#1194.#1130.#1218)(8 bytes)

• Sum of payment #4(for posterior) - Return Sales and correction return sales (#1194.#1130.#1219)(8 bytes)

• Sum of payment #5(by counter means) - Return Sales and correction return sales (#1194.#1130.#1220)(8 bytes)

• Sum of VAT rate #1(18%) - Return Sales and correction return sales (#1194.#1130.#1139)(8 bytes)

• Sum of VAT rate #2(10%) - Return Sales and correction return sales (#1194.#1130.#1140)(8 bytes)

• Sum of VAT rate #3(0%) - Return Sales and correction return sales (#1194.#1130.#1143)(8 bytes)

• Sum of VAT rate #4(NO VAT) - Return Sales and correction return sales (#1194.#1130.#1183)(8 bytes)

• Sum of VAT rate #5(18/118) - Return Sales and correction return sales (#1194.#1130.#1141)(8 bytes)

• Sum of VAT rate #6(10/110) - Return Sales and correction return sales (#1194.#1130.#1142)(8 bytes)

• Operations quantity - Purchases and correction purchases (#1194.#1131.#1135)(4 bytes)

• Sum of payments - Purchases and correction purchases (#1194.#1131.#1201)(8 bytes)

• Sum of payment #1(by cash) - Purchases and correction purchases (#1194.#1131.#1136)(8 bytes)

• Sum of payment #2(by electronic) - Purchases and correction purchases (#1194.#1131.#1138)(8 bytes)

• Sum of payment #3(in advance) - Purchases and correction purchases (#1194.#1131.#1218)(8 bytes)

• Sum of payment #4(for posterior) - Purchases and correction purchases (#1194.#1131.#1219)(8 bytes)

• Sum of payment #5(by counter means) - Purchases and correction purchases (#1194.#1131.#1220)(8 bytes)

• Sum of VAT rate #1(18%) - Purchases and correction purchases (#1194.#1131.#1139)(8 bytes)

• Sum of VAT rate #2(10%) - Purchases and correction purchases (#1194.#1131.#1140)(8 bytes)

• Sum of VAT rate #3(0%) - Purchases and correction purchases (#1194.#1131.#1143)(8 bytes)

• Sum of VAT rate #4(NO VAT) - Purchases and correction purchases (#1194.#1131.#1183)(8 bytes)

• Sum of VAT rate #5(18/118) - Purchases and correction purchases (#1194.#1131.#1141)(8 bytes)

• Sum of VAT rate #6(10/110) - Purchases and correction purchases (#1194.#1131.#1142)(8 bytes)

• Operations quantity – Return Purchases and correction return purchases (#1194.#1132.#1135)(4 bytes)

• Sum of payments - Return Purchases and correction return purchases (#1194.#1132.#1201)(8 bytes)

• Sum of payment #1(by cash) - Return Purchases and correction return purchases (#1194.#1132.#1136)(8 bytes)

• Sum of payment #2(by electronic) - Return Purchases and correction return purchases (#1194.#1132.#1138)(8 bytes)

• Sum of payment #3(in advance) - Return Purchases and correction return purchases (#1194.#1132.#1218)(8 bytes)

• Sum of payment #4(for posterior) - Return Purchases and correction return purchases (#1194.#1132.#1219)(8 bytes)

• Sum of payment #5(by counter means) - Return Purchases and correction return purchases (#1194.#1132.#1220)(8 bytes)

• Sum of VAT rate #1(18%) - Return Purchases and correction return purchases (#1194.#1132.#1139)(8 bytes)

• Sum of VAT rate #2(10%) - Return Purchases and correction return purchases (#1194.#1132.#1140)(8 bytes)

• Sum of VAT rate #3(0%) - Return Purchases and correction return purchases (#1194.#1132.#1143)(8 bytes)

• Sum of VAT rate #4(NO VAT) - Return Purchases and correction return purchases (#1194.#1132.#1141)(8 bytes)

• Sum of VAT rate #5(18/118) - Return Purchases and correction return purchases (#1194.#1132.#1142)(8 bytes)

• Sum of VAT rate #6(10/110) - Return Purchases and correction return purchases (#1194.#1132.#1)(8 bytes)

• Quantity of Correction Checks(#1194.#1133.#1144)(4 bytes)

• Quantity of Correction Checks - Sales(#1194.#1133.#1145.#1135)(4 bytes)

• Total of Correction Checks - Sales(#1194.#1133.#1145.#1201)(8 bytes)

• Quantity of Correction Checks – Return Sales(#1194.#1133.#1232.#1135)(4 bytes)

• Total of Correction Checks - Return Sales(#1194.#1133.#1232.#1201)(8 bytes)

• Quantity of Correction Checks - Purchases(#1194.#1133.#1146.#1135)(4 bytes)

• Total of Correction Checks - Purchases(#1194.#1133.#1146.#1201)(8 bytes)

• Quantity of Correction Checks – Return Purchases(#1194.#1133.#1233.#1135)(4 bytes)

• Total of Correction Checks - Return Purchases(#1194.#1133.#1233.#1201)(8 bytes)

## F7H: Ticket totals status

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: F7H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: F7H. Message Length: 55 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• extra charge(8 byte)

• discount(8 byte)

• void(8 byte)

• return(8 byte) -> not used in Russia

• sub total(8 byte)

• remainder(8 byte)

• number of receipt(2 byte)

• ticket is open(1 byte): 0->not open

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: F7H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: F7H. Message Length: 55 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• extra charge(8 byte)

• discount(8 byte)

• void(8 byte) -> not used in Russia

• return(8 byte) -> not used in Russia

• sub total(8 byte)

• remainder(8 byte)

• number of receipt(2 byte)

• ticket is open(1 byte): 0->not open

## F8H - ADDITIONAL INFO

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: F8H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: F8H. Message Length: 9 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• type of open ticket (1 byte)

0->no ticket open(or different ticket open from below list)

1->sale ticket open

2->return sale ticket open

3->purchase ticket open

4->return purchase ticket open

• number of tickets in the day (2 byte)

• number of documents in the day (2 byte)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: F8H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: F8H. Message Length: 18 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• type of open ticket (1 byte)

0->no ticket open(or different ticket open from below list)

1->sale ticket open

2->return sale ticket open

3->purchase ticket open

4->return purchase ticket open

• number of tickets in the day (2 byte)

• number of documents in the day (2 byte)

• last FD document number(4 bytes)

• last FD document fiscal sign(4 bytes)

• reason of ofd refusal of last sent doc(1 byte)

1 – Invalid fiscal sign

2 – Invalid acknowledge format

3 – Invalid FD number

4 – Invalid FN number

5 – Invalid CRC

6 – Invalid FDO TIN

## F9H: Not transmitted counters status

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: F9H. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: F9H. Message Length: 56 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Answer from FM: Quantity of Not Transmitted Checks and Correction Checks(#1158.#1144)(4 bytes)

• Answer from FM: Quantity of Not Transmitted Checks and Correction Checks - Sales(#1158.#1145.#1135)(4 bytes)

• Answer from FM: Total of Not Transmitted Checks and Correction Checks - Sales(#1158.#1145.#1201)(8 bytes)

• Answer from FM: Quantity of Not Transmitted Checks and Correction Checks – Return Sales(#1158.#1232.#1135)(4 bytes)

• Answer from FM: Total of Not Transmitted Checks and Correction Checks - Return Sales(#1158.#1232.#1201)(8 bytes)

• Answer from FM: Quantity of Not Transmitted Checks and Correction Checks - Purchases(#1158.#1146.#1135)(4 bytes)

• Answer from FM: Total of Not Transmitted Checks and Correction Checks - Purchases(#1158.#1146.#1201)(8 bytes)

• Answer from FM: Quantity of Not Transmitted Checks and Correction Checks – Return Purchases(#1158.#1233.#1135)(4 bytes)

• Answer from FM: Total of Not Transmitted Checks and Correction Checks - Return Purchases(#1158.#1233.#1201)(8 bytes)

## FAH: Get Cash in Drawer counter status

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: FAH. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: FAH. Message Length: 152 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Cash in Drawer(8 bytes)

• Number of Cash Deposit(2 bytes)

• Sum of Cash Deposit(8 bytes)

• Number of Cash Withdrawal (2 bytes)

• Sum of Cash Withdrawal (8 bytes)

• Number of Sale and correction sale Tickets Void (2 bytes)

• Sum of Sale and correction sale Tickets Void (8 bytes)

• Number of Return Sale and correction return sale Tickets Void (2 bytes)

• Sum of Return Sale and correction return sale Tickets Void (8 bytes)

• Number of Purchase and correction purchase Tickets Void (2 bytes)

• Sum of Purchase and correction purchase Tickets Void (8 bytes)

• Number of Return Purchase and correction return purchase Tickets Void (2 bytes)

• Sum of Return Purchase and correction return purchase Tickets Void (8 bytes)

• Number of Discounts – Sales and correction sales(2 bytes)

• Sum of Discounts – Sales and correction sales (8 bytes)

• Number of Add-ons – Sales and correction sales (2 bytes)

• Sum of Add-ons – Sales and correction sales (8 bytes)

• Number of Discounts – Return Sales and correction return sales (2 bytes)

• Sum of Discounts - Return Sales and correction return sales (8 bytes)

• Number of Add-ons - Return Sales and correction return sales (2 bytes)

• Sum of Add-ons - Return Sales and correction return sales (8 bytes)

• Number of Discounts - Purchases and correction return sales (2 bytes)

• Sum of Discounts - Purchases and correction purchases (8 bytes)

• Number of Add-ons - Purchases and correction purchases (2 bytes)

• Sum of Add-ons - Purchases and correction purchases (8 bytes)

• Number of Discounts – Return Purchases and correction return purchases (2 bytes)

• Sum of Discounts - Return Purchases and correction return purchases (8 bytes)

• Number of Add-ons - Return Purchases and correction return purchases (2 bytes)

• Sum of Add-ons - Return Purchases and correction return purchases (8 bytes)

## FBH: DEPARTMENTS Statistic reports

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: FBH. Message length: 7 bytes.

• Operator Password (4 bytes)

• Flags (1 byte)

* Bit 1 🡪 0=Day, 1=Period
* Bit 2 🡪 1=Department Totals

• Number of row(department)(1 bytes)

Answer: FBH. Message Length: 52 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte)

• Number of Sale – Sales and correction sales (4 bytes)

• Sum of Sale - Sales and correction sales (8 bytes)

• Number of Sale – Return Sales and correction return sales (4 bytes)

• Sum of Sale - Return Sales and correction return sales (8 bytes)

• Number of Sale - Purchases and correction purchases (4 bytes)

• Sum of Sale - Purchases and correction purchases (8 bytes)

• Number of Sale – Return Purchases and correction return purchases (4 bytes)

• Sum of Sale - Return Purchases and correction return purchases (8 bytes)

## FCH: DISCOUNTS Statistic reports

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: FCH. Message length: 7 bytes.

• Operator Password (4 bytes)

• Flags (1 byte) - Reserved

• Number of row(discount)(1 bytes)(1-20)

Answer: FCH. Message Length: 44 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte)

• Number of discount/add-on – Sales and correction sales (2 bytes)

• Sum of discount/add-on - Sales and correction sales (8 bytes)

• Number of discount/add-on – Return Sales and correction return sales (2 bytes)

• Sum of discount/add-on - Return Sales and correction return sales (8 bytes)

• Number of discount/add-on - Purchases and correction purchases (2 bytes)

• Sum of discount/add-on - Purchases and correction purchases (8 bytes)

• Number of discount/add-on – Return Purchases and correction return purchases (2 bytes)

• Sum of discount/add-on - Return Purchases and correction return purchases (8 bytes)

(\*)Data returned are daily data

(\*)by default:

- “Number of row”=5: discount, %, on item

- “Number of row”=6: add-on, %, on item

- “Number of row”=7: discount, value, on item

- “Number of row”=8: add-on, value, on item

- “Number of row”=16: discount, %, on sbt

- “Number of row”=17: add-on, %, on sbt

- “Number of row”=18: discount, value, on sbt

- “Number of row”=19: add-on, value, on sbt

- “Number of row”=20: rounding of ticket total per cash payment(see Bit 3 of field “Flag” of commands 85h and 8eh)

## FFH: Informations

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: FFH. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: FFH. Message Length: 56 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Printer Model(16 bytes)

• Version(16 bytes)

• ECR S/N(20 bytes)

----------------------------------------

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

Command: FFH. Message length: 6 bytes.

• Operator Password (4 bytes)

• Information type. Must be == 1 (1 byte)

Answer: FFH. Message Length: 21 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Fiscal State(1 byte)

• Actual FM in use or last FM used(16 bytes)

--------------------------------------

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

Command: FFH. Message length: 5 bytes.

• Operator Password (4 bytes)

Answer: FFH. Message Length: 99 bytes.

• Error code (2 bytes)

• Serial number of the operator (1 byte) 1 ... 99

• Printer Model(16 bytes)

• Version(16 bytes)

• ECR S/N(20 bytes)

• Fiscal State(1 byte)

• Actual FM in use or last FM used(16 bytes)

• Last FFD protocol version saved into ecr internal FM at registration(1 byte)

• Last ECR version saved into ecr internal FM at registration(16 bytes)

• Number of icons(1 byte)

• Number of dots of printer (2 bytes)

• Icons max size X(2 bytes)

• Icons max size Y(0=unspecified)(2 bytes)

• Icons file max size in KB(0=unspecified) (2 bytes)

## APPENDIX A1 – Family Code list

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

**Family Code 016** – VAT TABLE – 16 bytes

• VAT 1 (2 bytes, range: 0-9999)

• VAT 2 (2 bytes, range: 0-9999)

• VAT 3 (2 bytes, range: 0-9999)

• VAT 4 (2 bytes, range: 0-9999)

• VAT 5 (2 bytes, range: 0-9999)

• VAT 6 (2 bytes, range: 0-9999)

• VAT 7 (2 bytes, range: 0-9999)

• VAT 8 (2 bytes, range: 0-9999)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

**Family Code 016** – VAT TABLE – 12 bytes

• VAT 1(18%)(2 bytes, range: 0-9999)

• VAT 2(10%)(2 bytes, range: 0-9999)

• VAT 3(0%)(2 bytes, range: 0-9999)

• VAT 4(EXEMPT)(2 bytes, range: 0-9999)

• VAT 5(18/118)(2 bytes, range: 0-9999)

• VAT 6(10/110)(2 bytes, range: 0-9999)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

**Family Code 018** – PRINTER PARAMETERS – 5 bytes

• PRINT ENERGY (1 byte, list)

0~-24%  
1~-20%  
2~-16%  
3~-12%  
4~-8%  
5~-4%  
6~ 0  
7~+4%  
8~+8%  
9~+12%  
10~+16%  
11~+20%  
12~+24%

• PRINTER SPEED (1 byte, list)

55~55%  
70~70%  
100~100%

• BOTTOM LINE FEED (1 byte, range 0..20)

• INTERLINE COMPRESSION (1 byte, range 0..2)

• ENABLE CUTTER (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

**Family Code 018** – PRINTER PARAMETERS – 9 bytes

• PRINT ENERGY (1 byte, list)

0~-24%  
1~-20%  
2~-16%  
3~-12%  
4~-8%  
5~-4%  
6~ 0  
7~+4%  
8~+8%  
9~+12%  
10~+16%  
11~+20%  
12~+24%

• PRINTER SPEED (1 byte, list)

55~55%  
70~70%  
100~100%

• BOTTOM LINE FEED (1 byte, range 0..20)

• INTERLINE COMPRESSION (1 byte, range 0..2)

• TICKET FORMAT (4 byte, range 0..32767)

* bit 0: “Suppress sale line number if needed”
* bit 1: “Always suppress sale line number”
* bit 2: “Suppress fiscal logo printing”
* bit 3: “QR-code mixed with data”
* bit 4: “Compact sale line”
* bit 5: “No tag *Payment subject flag*, #1212”
* bit 6: “No tag *Way of payment flag*, #1214”
* bit 7: “No tag *Code of goods assortment*, #1162”
* bit 8: “No tag *Additional property of payment subject*, #1191”
* bit 9: “No tag *Flag of agent by payment subject*, #1222”
* bit 10: “No tag *Agent data*, #1223”
* bit 11: “No tag *Supplier data*, #1224”
* bit 12: “No tag *Supplier name*, #1226”
* bit 13: “No tag *Excise*, #1229”
* bit 14: “No tag *Additional property of check*, #1192”

• ENABLE CUTTER (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

**Family Code 019** – GENERAL CONFIGURATION – 3 bytes

• MANDATORY SUBTOTAL (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• CASH DRAWER VOLTAGE (1 byte, list)

0~24V  
1~12V  
2~6V

• FPU MODE (1 byte, list)

0~АВТО РЕЖИМ  
1~ПРИНУД.FPU  
2~ПРИНУД.ЛОКАЛ.  
3~ПРИНУД.АННУЛ.

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | - | - |

**Family Code 019** – GENERAL CONFIGURATION – 4 bytes

• MANDATORY SUBTOTAL (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• CASH DRAWER VOLTAGE (1 byte, list)

0~24V  
1~12V  
2~6V

• FPU MODE (1 byte, list)

0~АВТО РЕЖИМ  
1~ПРИНУД.FPU  
2~ПРИНУД.ЛОКАЛ.  
3~ПРИНУД.АННУЛ.

• ADD EXTRA INFO (1 byte)

0~255

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | X | X |

**Family Code 019** – GENERAL CONFIGURATION – 4 bytes

• MANDATORY SUBTOTAL (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• CASH DRAWER VOLTAGE (1 byte, list)

0~24V  
1~12V  
2~6V

• FPU MODE (1 byte, list)

0~АВТО РЕЖИМ  
1~ПРИНУД.FPU  
2~ПРИНУД.ЛОКАЛ.  
3~ПРИНУД.АННУЛ.

• ADD EXTRA INFO (1 byte)

0~255

• DISPLAY BACKLIGHT (1 byte)

0~100

• DISPLAY CONTRAST(1 byte)

0~9

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

**Family Code 021** – HEADER – 405 bytes

• HEADER LINE 1 - PROPERTY (1 bytes, see table 021-1)

• HEADER LINE 1 - TEXT (44 bytes, text)

• HEADER LINE 2 - PROPERTY (1 bytes, see table 021-2)

• HEADER LINE 2 - TEXT (44 bytes, text)

• HEADER LINE 3 - PROPERTY (1 bytes, see table 021-2)

• HEADER LINE 3 - TEXT (44 bytes, text)

• HEADER LINE 4 - PROPERTY (1 bytes, see table 021-2)

• HEADER LINE 4 - TEXT (44 bytes, text)

• HEADER LINE 5 - PROPERTY (1 bytes, see table 021-2)

• HEADER LINE 5 - TEXT (44 bytes, text)

• HEADER LINE 6 - PROPERTY (1 bytes, see table 021-2)

• HEADER LINE 6 - TEXT (44 bytes, text)

• HEADER LINE 7 - PROPERTY (1 bytes, see table 021-2)

• HEADER LINE 7 - TEXT (44 bytes, text)

• HEADER LINE 8 - PROPERTY (1 bytes, see table 021-2)

• HEADER LINE 8 - TEXT (44 bytes, text)

• HEADER LINE 9 - PROPERTY (1 bytes, see table 021-2)

• HEADER LINE 9 - TEXT (44 bytes, text)

TABLE 021-1

0~НЕТ  
2~ДВОЙНАЯ ВЫСОТА  
3~ДВОЙНАЯ ШИРИНА  
4~ДВ. ВЫСОТА+ШИРИНА  
5~ЖИРНЫЙ  
6~СЖАТЫЙ  
7~СЖАТЫЙ+ЖИРНЫЙ  
8~КУРСИВ

200~НОМЕР КАРТИНКИ 1

201~НОМЕР КАРТИНКИ 2

202~НОМЕР КАРТИНКИ 3

203~НОМЕР КАРТИНКИ 4

204~НОМЕР КАРТИНКИ 5

205~НОМЕР КАРТИНКИ 6

206~НОМЕР КАРТИНКИ 7

207~НОМЕР КАРТИНКИ 8

208~НОМЕР КАРТИНКИ 9

209~НОМЕР КАРТИНКИ 10

210~НОМЕР КАРТИНКИ 11

211~НОМЕР КАРТИНКИ 12

212~НОМЕР КАРТИНКИ 13

213~НОМЕР КАРТИНКИ 14

214~НОМЕР КАРТИНКИ 15

215~НОМЕР КАРТИНКИ 16

216~НОМЕР КАРТИНКИ 17

217~НОМЕР КАРТИНКИ 18

218~НОМЕР КАРТИНКИ 19

219~НОМЕР КАРТИНКИ 20

220~НОМЕР КАРТИНКИ 21

221~НОМЕР КАРТИНКИ 22

222~НОМЕР КАРТИНКИ 23

223~НОМЕР КАРТИНКИ 24

224~НОМЕР КАРТИНКИ 25

TABLE 021-2

0~НЕТ  
2~ДВОЙНАЯ ВЫСОТА  
3~ДВОЙНАЯ ШИРИНА  
4~ДВ. ВЫСОТА+ШИРИНА  
5~ЖИРНЫЙ  
6~СЖАТЫЙ  
7~СЖАТЫЙ+ЖИРНЫЙ  
8~КУРСИВ

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

**Family Code 023** – FOOTER – 405 bytes

• FOOTER LINE 1 - PROPERTY (1 bytes, see table 023-1)

• FOOTER LINE 1 - TEXT (44 bytes, text)

• FOOTER LINE 2 - PROPERTY (1 bytes, see table 023-1)

• FOOTER LINE 2 - TEXT (44 bytes, text)

• FOOTER LINE 3 - PROPERTY (1 bytes, see table 023-1)

• FOOTER LINE 3 - TEXT (44 bytes, text)

• FOOTER LINE 4 - PROPERTY (1 bytes, see table 023-1)

• FOOTER LINE 4 - TEXT (44 bytes, text)

• FOOTER LINE 5 - PROPERTY (1 bytes, see table 023-1)

• FOOTER LINE 5 - TEXT (44 bytes, text)

• FOOTER LINE 6 - PROPERTY (1 bytes, see table 023-1)

• FOOTER LINE 6 - TEXT (44 bytes, text)

• FOOTER LINE 7 - PROPERTY (1 bytes, see table 023-1)

• FOOTER LINE 7 - TEXT (44 bytes, text)

• FOOTER LINE 8 - PROPERTY (1 bytes, see table 023-1)

• FOOTER LINE 8 - TEXT (44 bytes, text)

• FOOTER LINE 9 - PROPERTY (1 bytes, see table 023-1)

• FOOTER LINE 9 - TEXT (44 bytes, text)

TABLE 023-1

0~НЕТ  
2~ДВОЙНАЯ ВЫСОТА  
3~ДВОЙНАЯ ШИРИНА  
4~ДВ. ВЫСОТА+ШИРИНА  
5~ЖИРНЫЙ  
6~СЖАТЫЙ  
7~СЖАТЫЙ+ЖИРНЫЙ  
8~КУРСИВ

200~НОМЕР КАРТИНКИ 1

201~НОМЕР КАРТИНКИ 2

202~НОМЕР КАРТИНКИ 3

203~НОМЕР КАРТИНКИ 4

204~НОМЕР КАРТИНКИ 5

205~НОМЕР КАРТИНКИ 6

206~НОМЕР КАРТИНКИ 7

207~НОМЕР КАРТИНКИ 8

208~НОМЕР КАРТИНКИ 9

209~НОМЕР КАРТИНКИ 10

210~НОМЕР КАРТИНКИ 11

211~НОМЕР КАРТИНКИ 12

212~НОМЕР КАРТИНКИ 13

213~НОМЕР КАРТИНКИ 14

214~НОМЕР КАРТИНКИ 15

215~НОМЕР КАРТИНКИ 16

216~НОМЕР КАРТИНКИ 17

217~НОМЕР КАРТИНКИ 18

218~НОМЕР КАРТИНКИ 19

219~НОМЕР КАРТИНКИ 20

220~НОМЕР КАРТИНКИ 21

221~НОМЕР КАРТИНКИ 22

222~НОМЕР КАРТИНКИ 23

223~НОМЕР КАРТИНКИ 24

224~НОМЕР КАРТИНКИ 25

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

**Family Code 030** – OFD PARAMETERS – 258 bytes

• FDO WEB SITE (128 bytes, text)

• FDO WEB SITE PORT (2 bytes, range 1..65535)

• WEB SITE FOR CHECK (128 bytes)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | - | - |

**Family Code 030** – OFD PARAMETERS – 131 bytes

• FDO WEB SITE (128 bytes, text)

• FDO WEB SITE PORT (2 bytes, range 1..65535)

• FDO CHANNEL (1 bytes, range 1..65535)

3~Wi-Fi  
5~Ethernet

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | X | X |

**Family Code 030** – OFD PARAMETERS – 130 bytes

• FDO WEB SITE (128 bytes, text)

• FDO WEB SITE PORT (2 bytes, range 1..65535)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

**Family Code 910** – COMMUNICATION PARAMETERS – 11 bytes

• PROTOCOL (1 byte, list)

0~NONE  
4~CUSTOM  
5~CUSTOM DLL  
7~CUSTOM RU

• BAURATE (4 bytes, list)

96~9600  
192~19200  
384~38400  
576~57600  
1152~115200

• BIT NUMBER (1 byte, list)

8~8,NONE,1  
7~7,ODD,1

• XON-XOFF TX FOOTER (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• XON-XOFF TX ECHO (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• HANDSHAKE (1 byte, list)

0~NONE  
1~RTS/CTS  
2~XON/XOFF

• DISPLAY LINE (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• PC CHANNEL (1 byte, list)

0~АВТО РЕЖИМ  
2~RS232  
3~Wi-Fi  
4~Bluetooth  
5~Ethernet  
6~USB

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | - | - |

**Family Code 911** – Eth PARAMETERS – 25 bytes

• ENABLE DHCP (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• IP ADDRESS (4 bytes, ip format)

• NETWORK MASK (4 bytes, ip format)

• GATEWAY (4 bytes, ip format)

• DNS (4 bytes, ip format)

• PORT (2 bytes, range 0..65535)

• MACID (6 bytes, read only. When writing family code 911 must be present, value is ignored)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | - | - |

**Family Code 912** – Wi-Fi PARAMETERS – 91 bytes

• ENABLE Wi-Fi (1 byte)• SSID name(32 bytes)

• Security Type (1 byte, list)

0~Open  
1~WEP

2~WPA/WPA2

• Password(32 bytes)

• ENABLE DHCP (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• IP Address(4 bytes)

• Subnet Mask(4 bytes)

• Gateway(4 bytes)

• DNS(4 bytes)

• Protocol Port(2 bytes)

• MACID (6 bytes, read only. When writing family code 912 must be present, value is ignored)

## APPENDIX A2 – tables list

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

**Family Code 120** – DEPARTMENT PARAMETERS – Number of rows: 16, size of row: 71 bytes

• DESCRIPTION (30 bytes, text)

• PRICE (8 bytes, range 0.. 999999999999)

• DEPT VAT CODE (1 bytes, range 1.. 6)

• SINGLE ITEM RECEIPT (1 byte, list)

0~DISABLED  
1~ENABLED

• WRITE-OFFS EN OP (1 byte, list)

0~ALL OPERATORS  
1~ONLY ENABLED OP.

• VOID ENABLED OP (1 byte, list)

0~ALL OPERATORS  
1~ONLY ENABLED OP.

• DISC/MARKUP ENAB OP (1 byte, list)

0~ALL OPERATORS  
1~ONLY ENABLED OP.

• DEPT ENABLED OP (1 byte, list)

0~ALL OPERATORS  
1~ONLY ENABLED OP.

• MIN AMOUNT (8 bytes, range 0.. 999999999999)

• MAX AMOUNT (8 bytes, range 0.. 999999999999)

• DISC/MARKUP MODE (1 bytes, range 0.. 20)

• MACRO FUNCTION (1 bytes, range 0.. 10)

• PRICE 1 (8 bytes, range 0.. 999999999999)

• DEPTS GROUPS (1 bytes, range 1.. 6)

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | - | - |
| FUSION V4.01.XX | N/A | - | - |

**Family Code 320** – OPERATOR PARAMETERS – Number of rows: 8, size of row: 84 bytes

• CODE (1 byte, range 0..99)

• PASSWORD (2 bytes, range 0..9999)

• DESCRIPTION (64 bytes, text)

• TEMPORARY OPERATOR (1 byte, list)

0~НЕ ВРЕМЕННЫЙ  
1~ВРЕМЕННЫЙ

• PROGRAM OPERATOR (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• PROGRAMMING MODE (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• ZEROSETTING MODE (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• READING MODE (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• REGISTERING MODE (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• REFUNDS (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• WRITE-OFFS (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• PAYMENT (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• DISC/MARKUP (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• DEPARTMENT (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• DISC/MARKUP ON SBT (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• VOID (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• OPERATOR ZEROSET (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• OPEARTOR REPORT (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• FISCAL ZEROSETTING (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• MACRO FUNCTION (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | - | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

**Family Code 320** – OPERATOR PARAMETERS – Number of rows: 8, size of row: 96 bytes

• CODE (1 byte, range 0..99)

• PASSWORD (2 bytes, range 0..9999)

• DESCRIPTION (64 bytes, text)

• TIN CASHIER (12 bytes, text)

• TEMPORARY OPERATOR (1 byte, list)

0~НЕ ВРЕМЕННЫЙ  
1~ВРЕМЕННЫЙ

• PROGRAM OPERATOR (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• PROGRAMMING MODE (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• ZEROSETTING MODE (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• READING MODE (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• REGISTERING MODE (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• REFUNDS (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• WRITE-OFFS (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• PAYMENT (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• DISC/MARKUP (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• DEPARTMENT (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• DISC/MARKUP ON SBT (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• VOID (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• OPERATOR ZEROSET (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• OPEARTOR REPORT (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• FISCAL ZEROSETTING (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

• MACRO FUNCTION (1 byte, list)

0~ОПЕР.ЗАПРЕЩЕНА  
1~ОПЕР.РАЗРЕШЕНА

|  |  |  |  |
| --- | --- | --- | --- |
| OFD PROT PRINTER | 1.0 | 1.05 | 1.1 |
| Q3X-Ф V3.01.XX | X | N/A | N/A |
| Q3X-Ф V4.01.XX | N/A | X | X |
| FUSION V4.01.XX | N/A | X | X |

**Family Code 520** – PAYMENT PARAMETERS – Number of rows: 4, size of row: 54 bytes

• ENABLE (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• DESCRIPTION (30 bytes)

• NO CASH (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• OPEN CASH DRAWER (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• MANDATORY SUBTOTAL (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• MANDATORY AMOUNT (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• CHANGE FORBIDDEN (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• DRAWER ONLY POS (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• RESERVED TO OPERATOR (1 byte, list)

0~ЗАПРЕЩЕН  
1~РАЗРЕШЕН

• MAX AMOUNT (8 bytes, range 0.. 999999999999)

• AMOUNT (8 bytes, range 0.. 999999999999)