

**Communication protocol
of the application layer**
Version 1.01

for Euro-150TE/TX Flexy EN
cash register
Document version **1.11**

Document update

Changes in version 1.00

- **initial version**

Changes in version 1.01

- **modified parameters of operations “Sale DB item” and “Return DB item”**
- **modified structure of DPT record (TBL_DPT)**
- **modified default keyboard layout**

Changes in version 1.02

- **added description of Euro-150TX**

Changes in version 1.03

- **change graphical logo size for Euro-150TX**

Changes in version 1.04

- **modified default keyboard layout of PRGKEY table**
- **modified response of operation GETDEVINFO**
- **added item FINREP_MONTHLYCOUNT to FINREPORT_DAY and FINREPORT_MON table**
- **added item TAX_PRINT to TAXSETTING table**

Changes in version 1.05

- **modified description of operation CLEAR**

Changes in version 1.06

- **added items FINREP_GT1, FINREP_GT2 and FINREP_GT3 to FINREPORT_DAY and FINREPORT_MON table**
- **added description of parameter *itemType* for SALEITEM and RETURNITEM commands**

Changes in version 1.07

- **change meaning for error 0x80040020 from “PLU not found” to “Item not found”**

Changes in version 1.08

- **change meaning for error 0x80040025 from “PLU is not container” to “Item is not container”**

Changes in version 1.09

- **modified maximum value of the PLU table records from 2000 to 2790**

Changes in version 1.10

- **added new operation values – warnings for journal occupation (0x010A001A, 0x010A001B)**

Changes in version 1.11

- **removed operation return values 0x00050002, 0x80040027, 0x80040050, 0x8005000F, 0x80050010, 0x80050011, 0x80060011, 0x810100E2, 0x810100E3, 0x810100E4, 0x810100E5, 0x810100EC, 0x810100F2, 0x810100F7**

Content

1 Specification of application layer protocol.....	5
1.1 Data unit of application layer protocol – ALL_PDU.....	5
1.2 Operations.....	6
1.2.1 Connection operation.....	8
1.2.1.1 Connect.....	8
1.2.1.2 Disconnect.....	8
1.2.1.3 Get device info.....	9
1.2.1.4 Get device state.....	9
1.2.1.5 Table operation.....	10
1.2.1.6 Get count.....	10
1.2.1.7 Get header.....	10
1.2.1.8 Set header.....	11
1.2.2 Record operation.....	12
1.2.2.1 Set record.....	12
1.2.2.2 Reset record.....	12
1.2.2.3 Get record.....	12
1.2.2.4 Clear.....	13
1.2.3 Functions.....	13
1.2.3.1 Make report.....	13
1.2.4 Online sale.....	14
1.2.4.1 Set training mode.....	14
1.2.4.2 Sale item.....	14
1.2.4.3 Sale DB item.....	14
1.2.4.4 Return item.....	15
1.2.4.5 Return DB item.....	15
1.2.4.6 Payment.....	16
1.2.4.7 Subtotal.....	16
1.2.4.8 Void item.....	17
1.2.4.9 Void receipt.....	17
1.2.4.10 Price adjust.....	17
1.2.4.11 Set reference number.....	17
1.2.4.12 Get fiscal info.....	18
1.2.4.13 Open drawer.....	18
1.2.4.14 Print duplicate.....	18
1.3 Example of procedure at calling operations.....	19
1.3.1 Sending data.....	19
1.3.2 Reading data.....	19
1.3.3 Read report (financial, drawer).....	19
1.3.4 Data initialization.....	19
1.3.5 Delete data.....	19
1.3.6 Executing report.....	19
2 Description ECR information.....	20
2.1 Tables.....	20
2.1.1 Price look up - goods (“PLU”.....	21
2.1.2 Department (“DPT”.....	21
2.1.3 Cashier (“OPERATOR”.....	22
2.1.4 Tax level (“TAXGROUP”.....	22
2.1.5 Measurement unit (“MEASUREUNIT”.....	22
2.1.6 Surcharge / Discount (“SURDISC”.....	22
2.1.7 Currency (“CURRENCY”.....	23
2.1.8 Price configuration (“PRICECONFIG”.....	23
2.1.9 Cash setting (“CASHSETTING”.....	23
2.1.10 Tax setting (“TAXSETTING”.....	23
2.1.11 Peripherals (“DEVICES”.....	24
2.1.12 Date/time (“DATETIME”.....	24
2.1.13 System parameter - flag (“SYSTEMPARAM”.....	24
2.1.14 Header Text logo (“TEXTLOGO”.....	24
2.1.15 Trailer Text logo (“TRAILERTEXTLOGO”.....	25
2.1.16 Setting graphic logo (“GRAPHLOGOSET”.....	25

2.1.17 Graphic logo (“GRAPHLOGO“)	25
2.1.18 Journal settings (“JOURNALSET“)	25
2.1.19 Advertising text (“ADVERTTEXT“)	26
2.1.20 Programmable keys (“PRGKEY“)	26
2.1.21 Daily financial report (“FINREPORT_DAY“), Monthly financial report (“FINREPORT_MON“)	27
2.1.22 Drawer report (“DRAWERREPORT“)	29
2.1.23 Electronic journal (“JOURNAL“)	30
2.1.24 Transaction log (“TRANSLOG“)	31
2.2 Reports	31
2.2.1 Financial report	31
2.2.2 Cashier report	31
2.2.3 Department report	31
2.2.4 PLU report	32
2.2.5 Drawer report	32
3 Additional information	33
3.1 State of Application and Device	33

1 Specification of application layer protocol

Running application on personal computer, changes information with the remote fiscal device. The application is a program or a part of program, that have access to one end of the communication channel. At the other end of this channel is the fiscal device, that provide set of retail registering operations. The device has the role of cash register, execute the received commands and send back the executed result to the application as answers.

The communication is defined with the following transfer data set:

APPLICATION	DEVICE
ALL_PDU (request)	----->
<-----	ALL_PDU (answer)

The application send request for execution of operation.

The device send back as answer, return value of operation.

1.1 Data unit of application layer protocol – ALL_PDU

Basic format of ALL_PDU frame, where all values are in text form separated with tabulator '/' (0x09) and ended with the new line character '/' (0x0A):

<OP_NAME></t><REQ_RSP></t><PARAM></n>

α OP_NAME – *Operation name* – name of application layer operation (see TABLE 1.2.1)

α REQ_RSP – *Request/response* - operation direction

- request “REQ”
- return “RSP”

α PARAM – *Parameters* - contains input/output parameters of the operation/result. The parameters are in text form, separated with tabulator '/' (0x09):

<PARAM1> </t><PARAM2>... </t><PARAM n >

- all text send from/to cash register are coded in [Windows 1250](#) encoding
- characters, that are not supported in the installed local encoding will be replaced with space
- to print character in double size, insert the symbol '~' (0x7E) in front of it.

1.2 Operations

TAB 1.2.1: List of supported operations

OP_NAME	Description
CONNECT	create connection between APPLICATION and DEVICE
DISCONNECT	close connection initialized by the operation <i>Connect</i>
GETDEVINFO	read information from device
GETDEVSTATE	read device status
GETCOUNT	read number of records
GETHEAD	read structure of record
SETHEAD	set record header
SETREC	set record attributes
RESETREC	initialize record
GETREC	read record
MAKEREPORT	execute report
CLEAR	delete record
SETTRAINING	set training sale mode
SALEITEM	sell item
SALEDBITEM	sell item from cash register DB
PAYMENT	payment
SUBTOTAL	subtotal
VOIDITEM	void of selling item
VOIDRECEIPT	receipt void
PRICEADJUST	percentage/value discount/surcharge
RETURNITEM	Return item
RETURNDBITEM	Return item from cash register DB
SETREFNUM	set reference number (e.g. number of document, customer ...)
GETFISCALINFO	get fiscal info
OPENDRAWER	open drawer
DUPLICATE	print receipt duplicate

TAB 1.2.2: Operation return value

returnCode			Description
Hex	Dec		
	unsigned	signed	
0	0	0	Operation done
0x00050002	327682	327682	Report warning limit reached, less then 60 financial Z reports are available
0x0006000B	393227	393227	Wrong parameter value
0x010A001A	17432602	17432602	Journal warning limit. Journal used on 80%.
0x010A001B	17432603	17432603	Journal warning limit. Journal used on 95%.
0x80010002	2147549186	-2147418110	Record ID is out of range
0x80020005	2147614725	-2147352571	Missing parameter
0x80040006	2147745798	-2147221498	Purchase is full, end receipt
0x80040009	2147745801	-2147221495	No such item
0x8004000B	2147745803	-2147221493	The last possible payment does not settle retail transaction, realize last payment
0x8004000E	2147745806	-2147221490	Value adjustment limit
0x8004000F	2147745807	-2147221489	Percent adjustment limit
0x80040010	2147745808	-2147221488	Zero or negative value of subtotal - at subtotal adjust operation
0x80040011	2147745809	-2147221487	Price already adjusted
0x80040012	2147745810	-2147221486	Not adjustable item
0x80040013	2147745811	-2147221485	Quantity1 is out of range
0x80040014	2147745812	-2147221484	Quantity2 is out of range

0x80040015	2147745813	-2147221483	Total quantity (q1 * q2) is out of range
0x80040016	2147745814	-2147221482	Invalid quantity
0x80040017	2147745815	-2147221481	Unit price is out of range
0x80040018	2147745816	-2147221480	Invalid unit price
0x80040019	2147745817	-2147221479	Purchase is in payment
0x8004001C	2147745820	-2147221476	Not enough currency
0x8004001E	2147745822	-2147221474	Sale impossible inactive PLU
0x8004001F	2147745823	-2147221473	Unit price change is not allowed
0x80040020	2147745824	-2147221472	Item not found
0x80040021	2147745825	-2147221471	Zero total price of PLU
0x80040022	2147745826	-2147221470	No sale yet
0x80040023	2147745827	-2147221469	Operation is not possible in this state
0x80040025	2147745829	-2147221467	Selected item is not returnable container
0x80040026	2147745830	-2147221466	Link PLU is not returnable container
0x80040028	2147745832	-2147221464	Illegal tender
0x80040030	2147745840	-2147221456	Item void is not allowed by reason of subtotal adjustment
0x8004003A	2147745850	-2147221446	Void of descriptive PLU is not allowed
0x8004003B	2147745851	-2147221445	Sale of descriptive PLU is not allowed
0x8004003C	2147745852	-2147221444	Bad tender value
0x8004003F	2147745855	-2147221441	Invalid quantity1 value
0x80040040	2147745856	-2147221440	Invalid quantity2 value
0x80040041	2147745857	-2147221439	Invalid payment value
0x80040042	2147745858	-2147221438	Too large payment value
0x80040043	2147745859	-2147221437	Change too large
0x80040044	2147745860	-2147221436	No item in the purchase
0x80040049	2147745865	-2147221431	Not enough foreign currency
0x8005000A	2147811338	-2147155958	Unable to execute daily report, report already done
0x8005000B	2147811339	-2147155957	Unable to execute monthly report, no daily report was done
0x8005000C	2147811340	-2147155956	Unable to execute monthly report, report already done
0x8005000E	2147811342	-2147155954	Autoexport txt journal error
0x80060007	2147876871	-2147090425	Unknown record
0x80060009	2147876873	-2147090423	Unsupported table
0x8006000A	2147876874	-2147090422	Unknown record attribute
0x8006000C	2147876876	-2147090420	Value cannot be set (read-only attribute or the change requirements are not fulfilled)
0x80060012	2147876882	-2147090414	Value cannot be set daily report required
0x80060013	2147876883	-2147090413	Value cannot be set, monthly report required
0x80060014	2147876884	-2147090412	Operation cannot be executed (requirements are not fulfilled)
0x80060018	2147876888	-2147090408	Value cannot be set, bar code duplicity
0x80060019	2147876889	-2147090407	Unsupported or bad record value
0x8006001A	2147876890	-2147090406	No graphic logo
0x8006001B	2147876891	-2147090405	Header was not set
0x80070007	2147942407	-2147024889	Unsupported operation
0x80070009	2147942409	-2147024887	ECR is busy
0x8007000A	2147942410	-2147024886	Connection refused
0x8101006A	2164326506	-2130640790	Illegal or unsupported operation, or invalid parameter value
0x810100C9	2164326601	-2130640695	Cover is open
0x810100CA	2164326602	-2130640694	Missing journal paper
0x810100CB	2164326603	-2130640693	Missing receipt paper
0x810100D8	2164326616	-2130640680	Receipt total overflow
0x810100DC	2164326620	-2130640676	Negative total (in one tax group at least) – in the case of first payment

1.2.1 Connection operation

1.2.1.1 Connect

Description: - crate connection between Application and Device on application layer
- operation must be used at beginning of the communication
- operation will cancel all previous header settings with operation *SetHeader*

Parameters: - none

Response:
▪ *returnCode* – operation result (see. TAB 1.2.2)

Usage example:
▪ request: CONNECT/tREQ/n
▪ response: CONNECT/tRSP/t0/n

Notice:
▪ Application start the connection by sending request. If Device return confirmation, connection is working.
▪ If Device refuses connection or Application don't get any answer until connection time out or an disconnection will be on lower layer, the Application will be not connected with Device.
▪ For more information see chapter 3.1.

1.2.1.2 Disconnect

Description: - stop connection between Application and Device, made with operation *Connect*
- operation is used at the end of communication
- in case of a new attempt of communication connection if the connection was not stopped, it will return error message

Parameters: - none

Response:
▪ *returnCode*

Usage example:
▪ request: DISCONNECT/tREQ/n
▪ response: DISCONNECT/tRSP/t0/n

Notice:
▪ If the application is connected and it send request for disconnection, after any response, time out or disconnection at lower communication layer, the Application will be disconnected from Device.
▪ If Application get answer for wrong command or a it's disconnected at a lower communication layer, then it will be in phase of aborted connection and a disconnection will be requested.
▪ If Device is connected and it get the CONNECT request, after which it send the refusing answer and it will enter the disconnected state
▪ In disconnected state Device serve only request for connection.
▪ See chapter 3.1.

1.2.1.3 Get device info

Description: - return information about connected device

Parameters: - none

Response:

- *returnCode*
- *devType* – device type (“E150TE“, “E150TX“)
- *countryID* – country identification code defined in ISO 3166 (“EN”)
- *swVersion* – firmware version (X.YYY)
- *protocolVersion* – communication protocol version (X.YY)
- *fiscalType* – fiscal/non fiscal version (“F”, “N”)
- *serialNum* – ECR serial number

Usage example:

- request: GETDEVINFO/tREQ/n
- response: GETDEVINFO/tRSP/t0/tE150TE/tEN/t1.026/t1.01/tN/tCEGL02866C/n

1.2.1.4 Get device state

Description: - return device state

Parameters: - none

Response:

- *returnCode* – device state (see. TAB 1.2.2: Operation return code)

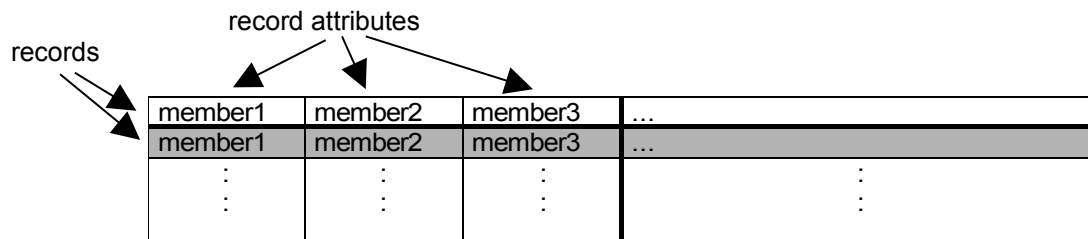
Usage example:

- request: GETDEVSTATE/tREQ/n
- response: GETDEVSTATE/tRSP/t0/n

1.2.1.5 Table operation

Table is a data structure of the ECR containing records.

Each record contains attributes (*members*), from which one is key attribute - ID record.



1.2.1.6 Get count

Description: - operation detect number of records in the table *tableName*

Parameters:

- *tableName*

Response:

- *returnCode*
- *recordsCount* – number of records

Usage example:

- request: GETCOUNT/tREQ/tPLU/**n**
- response: GETCOUNT/tRSP/t0/t2000/**n**

1.2.1.7 Get header

Description: - operation read record structure, names of all attributes from table *tableName*
 - for table „GRAPHLOGO“ will return graphic logo header in BMP format (see. 2.1.15)

Parameters:

- *tableName*

Response:

- *returnCode*
- *memberName* – name of 1.st attribute
- ...
- *memberName* – name of n.th attribute

Usage example:

- request: GETHEAD/tREQ/tDPT/**n**
- response: GETHEAD/tRSP/t0/tDPT_NAME/**n**

1.2.1.8 Set header

Description: - operation set record header of table *tableName*

- for table „GRAPHLOGO“ set the header of graphic logo in format BMP (see. 2.1.15)
- operation is used before operation *SetRec*, where the record structure is defined, that will be send
- operation is used before operation *GetRec*, where it set which record attributes will be added (not valid for table „GRAPHLOGO“)
- header setting is valid only until the executed operation above the same table, at using the operation *SetRec/GetRec* above other table, setting of header *SetHeader* is required.

Parameters:

- *tableName*
- *memberName* – name 1.st attribute
- ...
- *memberName* – name n.th attribute

Response:

- *returnCode*

Usage example:

- request: SETHEAD/tREQ/tDPT/tDPT_NAME/**n**
- response: SETHEAD/tRSP/t0/**n**

1.2.2 Record operation

1.2.2.1 Set record

Description: - operation set new attribute values of record *recordID* of the table *tableName*

Parameters:

- *tableName*
- *recordID*
- list of values, corresponding to attributes previous set by operation *SetHeader*

Response:

- *returnCode*

Usage example:

- request: SETREC/tREQ/tDPT/t1/tDPT1/n
- response: SETREC/tRSP/t0/n

1.2.2.2 Reset record

Description: - operation set default values for all programmable attributes of table *tableName*, from records with number *recordID* and number *count* records
- if values *recordID* and *count* will be null, they will initialize all records (whole table)

Parameters:

- *tableName*
- *recordID*
- *count*

Response:

- *returnCode*

Usage example:

- request: RESETREC/tREQ/tDPT/t1/t10/n
- response: RESETREC/tRSP/t0/n

1.2.2.3 Get record

Description: - operation return values of record *recordID* of table *tableName*
- returns only attribute values, already specified by operation *SetHeader*

Parameters:

- *tableName*
- *recordID*

Response:

- *returnCode*
- list of values, corresponding to attributes previous specified by operation *SetHeader*

Usage example:

- request: GETREC/tREQ/tDPT/t1/n
- response: GETREC/tRSP/t0/tDPT1/n

1.2.2.4 Clear

Description: - operation delete record of table *tableName*
- operation can be used only for table JOURNAL (operation deletes tables JOURNAL and TRANSLOG)

Parameters:
▪ *tableName*

Response:
returnCode

Usage example:
▪ request: CLEAR/tREQ/tJOURNAL/n
▪ response: CLEAR/tRSP/t0/n

1.2.3 Functions

1.2.3.1 Make report

Description: - operation execute report
- in the same time only one report can be executed

Parameters:
▪ *reportName* – report name (see TAB 2.2.1)
▪ list of report parameters

Response:
▪ *returnCode*

Usage example:
▪ request: MAKEREPORT/tREQ/tFISCAL_Z/tDAILY/n
▪ response: MAKEREPORT/tRSP/t0/n

1.2.4 Online sale

1.2.4.1 Set training mode

Description: - operation set training mode for sale item operations

Parameters: - without parameters

Response:

returnCode

Usage example:

- request: SETTRAINING/tREQ/n
- response: SETTRAINING/tRSP/t0/n

1.2.4.2 Sale item

Description: - operation executes sale of good

Parameters:

- *description* – description (name of item)
- *unitPrice* – unit price
- *vatID* – ID of tax level from DB of ECR
- *itemType* – item type (optional– *default value* 'N')
 - 'N' - normal
 - 'C' - container
- *quantity1* – amount 1 (optional– *default value* = 1)
- *qOperator* – quantity operator (optional – *default value* is '*')
 - '*' - amount1 * amount2
 - '/' - amount1 / amount2
- *quantity2* – amount 2 (optional – *default value* = 1)
- *unitName* – name of the measurement unit (optional)

Response:

- *returnCode*

Usage example:

- | | | |
|-------------|---|---------------------------------------|
| ▪ request: | SALEITEM/tREQ/tMilk/t0,65/t2/n | Milk 1*0,65 € tax level B |
| ▪ request: | SALEITEM/tREQ/tMilk/t0,65/t2/tN/t3/n | Milk 3*0,65 € tax level B |
| ▪ request: | SALEITEM/tREQ/tMilk/t0,65/t2/tN/t3/t/tLit/n | Milk 3Lit*0,65 € tax level B |
| ▪ request: | SALEITEM/tREQ/tMilk/t0,65/t2/tN/t3/t*/t4/n | Milk 3*4*0,65 € tax level B |
| ▪ request: | SALEITEM/tREQ/tMilk/t0,65/t2/tN/t3/t/t4/n | Milk 3*4*0,65 € tax level B |
| ▪ request: | SALEITEM/tREQ/tMilk/t0,65/t2/tN/t3/t//t4/n | Milk 3/4*0,65 € tax level B |
| ▪ request: | SALEITEM/tREQ/tMilk/t0,65/t2/tN/t3/t*/t4/tLit/n | Milk 3*4Lit*0,65 € tax level B |
| ▪ response: | SALEITEM/tRSP/t0/n | |

1.2.4.3 Sale DB item

Description: - operation executes sell of good from ECR DB

Parameters:

- *itemID* – ID of sale item
- *itemType* – Type of sale item (optional – *default type* is 'P')
 - 'P' - PLU
 - 'D' - DPT
- *unitPrice* – unit price (optional – *default* = *pre-set price*)
- *quantity1* – amount 1 (optional – *default value* = 1)
- *qOperator* – quantity operator (optional – *default operator* is '*')
 - '*' - amount1 * amount2

• '/' - amount1 / amount2

- *quantity2* – amount 2 (optional – *default value = 1*)

Response:

- *returnCode*

Usage example:

▪ request:	SALEDBITEM/tREQ/t1/n	PLU1 1*0,70 €	pre-set price
▪ request:	SALEDBITEM/tREQ/t1/tD/n	DPT1 1*0,70 €	pre-set price
▪ request:	SALEDBITEM/tREQ/t1/tP/t0,65/n	PLU1 1*0,65 €	
▪ request:	SALEDBITEM/tREQ/t1/tP/t/t2/n	PLU1 2*0,70 €	
▪ request:	SALEDBITEM/tREQ/t1/tP/t0,65/t2/n	PLU1 2*0,65 €	
▪ request:	SALEDBITEM/tREQ/t1/tP/t0,65/t2/t*/t3/n	PLU1 2*3*0,65 €	
▪ request:	SALEDBITEM/tREQ/t1/tP/t/t2/t*/t3/n	PLU1 2*3*0,70 €	
▪ request:	SALEDBITEM/tREQ/t1/tP/t/t2/t/t3/n	PLU1 2/3*0,70 €	
▪ response:	SALEDBITEM/tRSP/t0/n		

1.2.4.4 Return item

Description: - operation executes return of good

Parameters:

- *description* – description (name of item)
- *unitPrice* – unit price
- *vatID* – ID of tax level from DB of ECR
- *itemType* – item type (optional– *default value 'N'*)
 - 'N' - normal
 - 'C' - container
- *quantity1* – amount 1 (optional– *default value = 1*)
- *qOperator* – quantity operator (optional – *default value is '*'*)
 - '*' - amount1 * amount2
 - '/' - amount1 / amount2
- *quantity2* – amount 2 (optional – *default value = 1*)
- *unitName* – name of the measurement unit (optional)

Response:

- *returnCode*

Usage example:

▪ request:	RETURNITEM/tREQ/tMilk/t0,65/t2/n	Milk 1*0,65 €	tax level B
▪ request:	RETURNITEM/tREQ/tMilk/t0,65/t2/tN/t3/n	Milk 3*0,65 €	tax level B
▪ request:	RETURNITEM/tREQ/tMilk/t0,65/t2/tN/t3/t/tLit/n	Milk 3Lit*0,65 €	tax level B
▪ request:	RETURNITEM/tREQ/tMilk/t0,65/t2/tN/t3/t*/t4/n	Milk 3*4*0,65 €	tax level B
▪ request:	RETURNITEM/tREQ/tMilk/t0,65/t2/tN/t3/t/t4/n	Milk 3*4*0,65 €	tax level B
▪ request:	RETURNITEM/tREQ/tMilk/t0,65/t2/tN/t3/t//t4/n	Milk 3/4*0,65 €	tax level B
▪ request:	RETURNITEM/tREQ/tMilk/t0,65/t2/tN/t3/t*/t4/tLit/n	Milk 3*4Lit*0,65 €	tax level B
▪ response:	RETURNITEM/tRSP/t0/n		

1.2.4.5 Return DB item

Description: - operation executes return of good from ECR DB

Parameters:

- *itemID* – ID of PLU item
- *itemType* – Type of sale item (optional – *default type is 'P'*)
 - 'P' - PLU
 - 'D' - DPT
- *unitPrice* – unit price (optional – *default = pre-set price*)

- *quantity1* – amount 1 (optional – *default value = 1*)
- *qOperator* – *quantity* operator (optional – *default operator is '*'*)
 - '*' - amount1 * amount2
 - '/' - amount1 / amount2
- *quantity2* – amount 2 (optional – *default value = 1*)

Response:

- *returnCode*

Usage example:

- | | | | |
|-------------|---------------------------------------|-----------------|---------------|
| ▪ request: | RETURNDBITEM/tREQ/t1/n | PLU1 1*0,70 € | pre-set price |
| ▪ request: | RETURNDBITEM/tREQ/t1/tD/n | DPT1 1*0,70 € | pre-set price |
| ▪ request: | RETURNDBITEM/tREQ/t1/t0,65/n | PLU1 1*0,65 € | |
| ▪ request: | RETURNDBITEM/tREQ/t1/t/t2/n | PLU1 2*0,70 € | |
| ▪ request: | RETURNDBITEM/tREQ/t1/t0,65/t2/n | PLU1 2*0,65 € | |
| ▪ request: | RETURNDBITEM/tREQ/t1/t0,65/t2/t*/t3/n | PLU1 2*3*0,65 € | |
| ▪ request: | RETURNDBITEM/tREQ/t1/t/t2/t*/t3/n | PLU1 2*3*0,70 € | |
| ▪ request: | RETURNDBITEM/tREQ/t1/t/t2/t//t3/n | PLU1 2/3*0,70 € | |
| ▪ response: | RETURNDBITEM/tRSP/t0/n | | |

1.2.4.6 Payment

Description: - operation executes payment regarding parameters

Parameters:

- *amount* – payment value (optional – *default value is equal to the purchase value*)
- *tenderType* – type of purchase (optional – *default 'C'*)
 - 'C' - cash („Cash“)
 - 'R' - bank card („caRd“)
 - 'E' - check („chEck“)
- *currency* – (optional – *default operator is 'N'*)
 - 'N' - local currency („National“)
 - 'F' - foreign currency („Foreign“)
- *cardNumber* – number of bank card if *tenderType* = 'R' (optional)

Response:

- *returnCode*

Usage example:

- | | |
|-------------|---|
| ▪ request: | PAYMENT/tREQ/n |
| ▪ request: | PAYMENT/tREQ/t10,00/n |
| ▪ request: | PAYMENT/tREQ/t10,00/tC/n |
| ▪ request: | PAYMENT/tREQ/t10,00/tC/tN/n |
| ▪ request: | PAYMENT/tREQ/t10,00/tR/tN/t1234567890/n |
| ▪ response: | PAYMENT/tRSP/t0/n |

1.2.4.7 Subtotal

Description: - operation executes subtotal

Parameters: - without parameters

Response:

- *returnCode*

Usage example:

- | | |
|-------------|--------------------|
| ▪ request: | SUBTOTAL/tREQ/n |
| ▪ response: | SUBTOTAL/tRSP/t0/n |

1.2.4.8 Void item

Description: - operation executes void function

Parameters:

- *itemPosition* – position of the item on the receipt (*optional – if value is not set, the last item/operation will be voided*)

Response:

- *returnCode*

Usage example:

- request: VOIDITEM/tREQ/n
- response: VOIDITEM/tRSP/t0/n

1.2.4.9 Void receipt

Description: - cancel of the receipt

Parameters: - without parameters

Response:

- *returnCode*

Usage example:

- request: VOIDRECEIPT/tREQ/n
- response: VOIDRECEIPT/tRSP/t0/n

1.2.4.10 Price adjust

Description: - operation applies percentage/value surcharge/discount on the last sold item or operation

Parameters:

- *adjustType* – surcharge/discount
 - 'D' - discount („Discount“)
 - 'S' - surcharge („Surcharge“)
- *adjustStyle* – percentage/valued
 - 'P' - percentage („Percent“)
 - 'V' - valued („Value“)
- *amount* – value of discount/surcharge

Response:

- *returnCode*

Usage example:

- request: PRICEADJUST/tREQ/tD/tP/t10/n
- response: PRICEADJUST/tRSP/t0/n

1.2.4.11 Set reference number

Description: - set reference number (used as number of document or customer)

Parameters:

- *refNum* – reference number (max. 18 chars)

Response:

- *returnCode*

Usage example:

- request: SETREFNUM/tREQ/t1234567890/n
- response: SETREFNUM/tRSP/t0/n

1.2.4.12 Get fiscal info

Description: - operation read number of last report and number of last printed receipt or open receipt

Parameters: - none

Response:

- *returnCode*
- *reportNum* – report number
- *receiptNum* – receipt number

Usage example:

- request: OPENDRAWER/tREQ/n
- response: OPENDRAWER/tRSP/t0/n

1.2.4.13 Open drawer

Description: - operation executes opening of drawer (if connected)

Parameters: - none

Response:

- *returnCode*

Usage example:

- request: OPENDRAWER/tREQ/n
- response: OPENDRAWER/tRSP/t0/n

1.2.4.14 Print duplicate

Description: - operation executes print of duplicate

Parameters: - none

Response:

- *returnCode*

Usage example:

- request: DUPLICATE/tREQ/n
- response: DUPLICATE/tRSP/t0/n

1.3 Example of procedure at calling operations

1.3.1 Sending data

1. *Connect* – creating communication
2. *GetHeader* – reading header (not obligatory)
3. *SetHeader* – set header
4. *SetRec* – set record attributes (in cycle for each required record)
5. *Disconnect* – closing connection

1.3.2 Reading data

1. *Connect* – creating communication
2. *GetHeader* – reading header (not obligatory)
3. *SetHeader* – set header
4. *GetRec* – read record (in cycle for each required record)
5. *Disconnect* – closing connection

1.3.3 Read report (financial, drawer)

1. *Connect* – creating communication
2. *GetHeader* – reading header (not obligatory)
3. *SetHeader* – set header
4. *GetRec* – read record (in cycle for each required record)
5. *Disconnect* – closing connection

1.3.4 Data initialization

1. *Connect* – creating communication
2. *ResetRec* – record initialization (in cycle for each required record)
3. *Disconnect* – closing connection

1.3.5 Delete data

1. *Connect* – creating communication
2. *Clear* – delete data
3. *Disconnect* – closing connection

1.3.6 Executing report

1. *Connect* – creating communication
2. *Make report* – print report
3. *Disconnect* – closing connection

2 Description ECR information

2.1 Tables

TAB 2.1.1 List of ECR tables

TableName	Description	Number of records	Operation		
			Read		Send
			Prg	Report	
PLU	Items/goods	2790 ¹	x	x	x
DPT	Department	20	x	x	x
OPERATOR	Cashier/operator	10	x	x	x
DATETIME	Date/time	1	x	-	x
TAXGROUP	Tax level	7	x	- ²	x
MEASUREUNIT	Measurement units	8	x	-	x
SURDISC	Surcharge-discount	1	x	-	x
TEXTLOGO	Header Text logo	1	x	-	-
TRAILERTEXTLOGO	Trailer Text logo	1	x	-	x
CURRENCY	Currency	2 ³	x	-	x
PRICECONFIG	Price setting	1	x	-	x
CASHSETTING	Cash setting	2 ⁴	x	-	x
TAXSETTING	Tax setting	1	x	-	x
DEVICES	Peripheral	4 ⁵	x	-	x
SYSTEMPARAM	System parameters	1	x	-	x
GRAPHLOGOSET	Setting graphic logo	1	x	-	x
GRAPHLOGO	Graphic logo	140 ⁶	x	-	x
JOURNALSET	Electronic journal settings	1	x ¹¹	-	x ¹¹
ADVERTISEXT	Advertising text	2	x	-	x
PRGKEY	Programmable keys	39	x	-	x
FINREPORT_DAY	Financial daily report	79 ⁷	-	x	-
FINREPORT_MON	Financial monthly report	79 ⁷	-	x	-
DRAWERREPORT	Drawer report	52 ⁸	-	x	-
JOURNAL	Electronic journal	n ⁹	-	x ¹¹	-
TRANSLOG	Transaction log	n ¹⁰	-	x ¹¹	-

¹- this is maximum value – number of records depends on cash register setting, PLU range is 10 - 2790

²- sale information is included in financial report

³- record number:

1 – main currency – currency in which are all important financial counters

2 – foreign (secondary) currency – any other currency for purchase sells, used for parallel use with the main currency.

⁴- record number: 1 – setting of main currency (read only), 2 – setting of secondary currency

⁵- record number: 1 – scanner, 2 – scale, 3 – payment terminal, 4 – external display

⁶- record number is equal to the number of lines of graphic logo

⁷- record number is equal to the number of financial report records (see 2.1.19)

⁸- record number is equal to the number of drawer report records (see 2.1.20)

⁹- record number is equal to the number of journal rows (provided by method *GetCount*)

¹⁰- record number is equal to the number of transaction log rows (provided by method *GetCount*)

¹¹- command is available only for Euro-150TE version

2.1.1 Price look up - goods (“PLU”)

MemberName	Description
PLU_PRICE	price (max 9 999 999,99)
PLU_NAME	name (max. 42 characters for Euro-150TE and max 28 characters for Euro-150TX)
PLU_BARCODE	Bar code ¹ (max 18-digits)
PLU_TAXRATE	Assignment to tax level: $(1 \div n)$ – tax level record ID
PLU_DPT	Assignment to department: $(1 \div n)$ - department record ID
PLU_UNIT	Assignment to measurement unit: 0 - unallocated, $(1 \div n)$ - measurement unit ID
PLU_LINK	Assignment to linked PLU: 0 - unallocated, $(1 \div n)$ – PLU record ID ²
PLU_OTHERPRICE	Allow use enter price from keyboard: 0 (“NO”) – no, 1 (“YES”) – yes
PLU_DESCRIPTOR	Description item: 0 (“NO”) – no, 1 (“YES”) – yes
PLU_CONTAINER	Returnable container: 0 (“NO”) – no, 1 (“YES”) – yes
PLU_STOCK	stock of PLU ³
PLU_QUANTITY	Sold quantity
PLU_AMOUNT	Sold amount

¹– duplicate bar code is not allowed

²– multilevel linking is not allowed, if an item is already linked, further linking of this item will be ignored
- items cannot be linked to itself

³– for the addition / removal of inventory is necessary to add character '+' or '-'

2.1.2 Department (“DPT”)

MemberName	Description
DPT_NAME	name (max. 42 characters for Euro-150TE and max 28 characters for Euro-150TX)
DPT_PRICE	price (max 9 999 999,99)
DPT_TAXRATE	assignment to tax level: $(1 \div n)$ – tax level record ID
DPT_DQUANTITY	Daily sold quantity
DPT_DAMOUNT	Daily sold amount
DPT_MQUANTITY	Monthly sold quantity
DPT_MAMOUNT	Monthly sold amount

2.1.3 Cashier (“OPERATOR”)

MemberName	Description
OPERATOR_NAME	name (10 characters)
OPERATOR_PSWD	Login password (4 digits)
OPERATOR_XMODE	Allow access to X mode of ECR: 0 (“NO”) – no, 1 (“YES”) – yes
OPERATOR_ZMODE	Allow access to Z mode of ECR: 0 (“NO”) – no, 1 (“YES”) – yes
OPERATOR_PMODE	Allow access to P mode of ECR: 0 (“NO”) – no, 1 (“YES”) – yes
OPERATOR_TMODE	Allow access to T mode of ECR: 0 (“NO”) – no, 1 (“YES”) – yes
OPERATOR_REFUND	Allow refund operation in R mode: 0 (“NO”) – no, 1 (“YES”) – yes
OPERATOR_VOID	Allow void operation in R mode: 0 (“NO”) – no, 1 (“YES”) – yes
OPERATOR_SURDISC	Allow surcharge/discount operation in R mode: 0 (“NO”) – no, 1 (“YES”) – yes
OPERATOR_DQUANTITY	Daily sell quantity by operator
OPERATOR_DAMOUNT	Daily sell amount by operator
OPERATOR_MQUANTITY	Monthly sell quantity by operator
OPERATOR_MAMOUNT	Monthly sell amount by operator

2.1.4 Tax level (“TAXGROUP”)

MemberName	Description
TAXGROUP_RATE	Tax rate: $(0.00 \div 100.00)\%$
TAXGROUP_TYPE	Tax level type: 0- (“TAXFREE”) – non taxable 1 - (“VAT”) – taxable,

2.1.5 Measurement unit (“MEASUREUNIT”)

MemberName	Description
MEASUREUNIT_NAME	name (max 3 characters)

2.1.6 Surcharge / Discount (“SURDISC”)

MemberName	Description
PERCSURCHLIMIT	Limit for manual setting of the surcharge during sell*: $(0.00 \div 100.00)\%$
PERCSURCHRATE	Programmed value of the surcharge: $(0.00 \div 100.00)\%$

PERCDISCLIMIT	Limit for manual setting of discount during sell*: $(0.00 \div 100.00)\%$
PERCDISCRATE	Programmed value of the discount: $(0.00 \div 100.00)\%$

* if set value 00,00%, application of surcharge or discount is denied.

2.1.7 Currency (“CURRENCY”)

MemberName	Description
CURRENCY_NAME	Currency name (max 3 characters)
CURRENCY_RATE	Currency rate regarding main currency ² : $(0 \div 2147,4836)$
CURRENCY_SCALE	Number of decimal places ¹ : $(0 \div 2)$

¹ – in case of secondary currency, the parameter will be ignored

² – in case of main currency the parameter will be ignored.

2.1.8 Price configuration (“PRICECONFIG”)

MemberName	Description
UNITPRICE_SCALE	Number of decimal places for unit price: $(0 \div 3)$
PRICE_ROUNDTYPE	Rounding method: 0 (“DOWN”) – down, 1 (“UP”) – up, 2 (“UPFROM5”) – from 5 up, 3 (“QUARTER”) – quarter 4 (“EIGHT”) – octal
PRICE_ROUNDPLACE	Rounding position: $(0 \div 2)$

2.1.9 Cash setting (“CASHSETTING”)

MemberName	Description
CASH_ROUNDTYPE	Rounding method ¹ : 0 (“DOWN”) – down, 1 (“UP”) – up, 2 (“UPFROM5”) – from 5 up, 3 (“QUARTER”) – quarter 4 (“EIGHT”) – octal
CASH_ROUNDPLACE	Rounding position ¹ : $(0 \div 2)$

¹ – in case of main currency the parameter is read only

2.1.10 Tax setting (“TAXSETTING”)

MemberName	Description
TAX_ROUNDTYPE	Rounding method: 0 (“DOWN”) – down, 1 (“UP”) – up, 2 (“UPFROM5”) – from 5 up, 3 (“QUARTER”) – quarter 4 (“EIGHT”) – octal
TAX_ROUNDPLACE	Rounding position: $(0 \div 2)$
TAX_PRINT	Print tax information: 0 (“NO”) – no, 1 (“YES”) – yes

2.1.11 Peripherals (“DEVICES“)

MemberName	Description
DEV_TYPE	Set the type or setting regarding to type of device ¹
DEV_PORT	Communication port: 0 (“NONE”) – none, 1 (“COM1”) – COM1, 2 (“COM2”) – COM2, 3 (“COM3”) – COM3

¹ device type:

1.scanner – scanner terminating character :

- 0 - "CR LF"
- 1 - "CR"
- 2 - "LF"

2.scale – type:

- 0 - "Morcan, MARTES T"
- 1 - "Euro, MARTES M"
- 2 - "Macca K"
- 3 - "DIBAL"
- 4 - "Motex R"
- 5 - "Mettler Toledo"
- 6 - "ACOM"
- 7 - "CAS Morcan TP2"

3.payment terminal – type:

- 0 - "Dionica SK SLSP"
- 1 - "Bull SK"
- 2 - "Firstdata I5100"

4. external display – type:

- 0 – "ED-2500"

2.1.12 Date/time (“DATETIME“)

MemberName	Description
DATE	date (format DDMMRR)
TIME	time (format HHMM)

2.1.13 System parameter - flag (“SYSTEMPARAM“)

MemberName	Description
SYS_STANDBY_TIME	Stand by (min): (0 ÷ 60), 0 – turned off
SYS_DSPBACKLIGHT_CNTRL	Display back-light: 0 – turned off 1 – turned on 2 – automatically turned off after 30s
SYS_POSID	Cash register number: (01 ÷ 99)
SYS_FIND_INSTORE_BC	Way of searching EAN code witch price/weight tag 0 – by first 6 digit of EAN code 1 – by PLU number (3. to 6. digit)

2.1.14 Header Text logo (“TEXTLOGO“)

MemberName	Description
LOGOLINE1	1. row of text logo (max. 42 characters for Euro-150TE and max 28 characters for Euro-150TX)
LOGOLINE2	2. row of text logo
LOGOLINE3	3. row of text logo
LOGOLINE4	4. row of text logo
LOGOLINE5	5. row of text logo
LOGOLINE6	6. row of text logo
LOGOLINE7	7. row of text logo
LOGOLINE8	8. row of text logo
LOGOLINE9	9. row of text logo
LOGOLINE10	10. row of text logo – reserved for tax payer number
LOGOLINE11	11. row of text logo – reserved for unique number

2.1.15 Trailer Text logo (“TRAILERTEXTLOGO”)

MemberName	Description
LOGOLINE1	1. row of text logo (max. 42 characters for Euro-150TE and max 28 characters for Euro-150TX)
LOGOLINE2	2. row of text logo
LOGOLINE3	3. row of text logo
LOGOLINE4	4. row of text logo
LOGOLINE5	5. row of text logo
LOGOLINE6	6. row of text logo
LOGOLINE7	7. row of text logo
LOGOLINE8	8. row of text logo
LOGOLINE9	9. row of text logo

2.1.16 Setting graphic logo (“GRAPHLOGOSET”)

MemberName	Description
GRAPHLOGO_PRINT	Print graphic logo: 0 (“NO”) – no, 1 (“YES”) – yes

2.1.17 Graphic logo (“GRAPHLOGO”)

MemberName	Description
	Row of graphic logo

–Graphic logo is transferred in BMP format, and each byte is transformed and transferred in text form. This text is in hexadecimal form (for ex. byte with value 0x3F is transformed to 3F“)

–BMP format cannot be compressed only at 1 bit deepness. Size of graphic logo have to be 360x240 for Euro-150TE and 240x240 for Euro-150TX, number of rows can differ (1÷240)

–records 1÷ n (with maximum 240) contains each row of the graphic logo, row size is 360 pixels(bits) for Euro-150TE and 160 for Euro-150TX, it's 45/30 Bytes, length of text data is 90/40 characters

– with operation *GetHeader/SetHeader* is the loaded/written graphic logo header in BMP format, in 62B size, length of text string is 124 (2x62) characters

2.1.18 Journal settings (“JOURNALSET”)

MemberName	Description
JOURNAL_AUTOEXPORT	automatically export journal after executing of daily financial report with erasing 0 ("NO") – no 1 ("YES") – yes

2.1.19 Advertising text ("ADVERTTEXT")

MemberName	Description
ADVERTISEMENT_TEXT	advertisement text <i>(not used for type 1 a 2)</i>
ADVERTISEMENT_TYPE	type: 0 – advertisement text 1 – current date 2 – current time
ADVERTISEMENT_LOOKUP	way of presentation: 0 – off, 1 – static text, 2 – blinking text, 3 – scrolling text, 4 – scrolling text in both lines

2.1.20 Programmable keys ("PRGKEY")

MemberName	Description
PRGKEY_KEY	basic key function code
PRGKEY_KEYSHIFT	shift + key function code

ID	Description	ID	Description	ID	Description	ID	Description
13	RETURN (TOTAL)	256	numeric key '00'	269	'REFUND' key	282	'PLU' key
27	'CLEAR' key	257	'MENU' key	270	'SCALE' key	283	PLU search
46	decimal point	258	cashier logout	271	CARD payment	284	'DPT' key
48	numeric key '0'	259	paper feed	272	'EAN' key	285	SUB-TOTAL
49	numeric key '1'	260	UP key	273	CHECK payment	286	'SHIFT' key
50	numeric key '2'	261	DOWN key	274	multiply	295	drawer key
51	numeric key '3'	262	display contrast +	275	divide	301	'DPT1' key
52	numeric key '4'	263	display contrast -	276	'PRICE' key
53	numeric key '5'	264	LEFT key	277	'DUPLICATE' key	320	'DPT20' key
54	numeric key '6'	265	RIGHT key	278	percentage surcharge	1001	'PLU1' key
55	numeric key '7'	266	'PageUP' key	279	value surcharge	1002	'PLU2' key
56	numeric key '8'	267	'PageDOWN' key	280	percentage discount
57	numeric key '9'	268	'VOID' key	281	value discount	3790	'PLU2790' key

- all of **bold** marked operation must be assigned to some keyboard key

	1 281 280	2 279 278	3 269 268	4 055 055	5 056 056	6 057 057	7 259 027	8 262 260	9 258 257
10 316 307	11 317 308	12 318 309	13 271 270	14 052 052	15 053 053	16 054 054	17 283 282	18 267 264	19 266 265
20 313 304	21 314 305	22 315 306	23 273 272	24 049 049	25 050 050	26 051 051	27 277 276	28 263 261	29 295 285
30 310 301	31 311 302	32 312 303	33 286 286	34 284 048	35 256 256	36 046 046	37 275 274	38 013 013	

- if PRGKEY_KEY is SHIFT key, PRGKEY_KEYSHIFT have to be SHIFT key too
- if PRGKEY_KEY is not SHIFT key, then PRGKEY_KEYSHIFT cannot be SHIFT key

2.1.21 Daily financial report (“FINREPORT_DAY”), Monthly financial report (“FINREPORT_MON“)

MemberName	Description
REPORT_VALUE_NAME	value name
REPORT_VALUE	value

record (item) number	ValueName	Description
1	FINREP_DAILYCOUNT	count of daily reports
2	FINREP_MONTHLYCOUNT	count of monthly reports
3	FINREP_GT1	GT1
4	FINREP_GT2	GT2
5	FINREP_GT3	GT3
6	FINREP_VATRATE1	tax level 1
7	FINREP_VATRATE2	tax level 2
8	FINREP_VATRATE3	tax level 3
9	FINREP_VATRATE4	tax level 4
10	FINREP_VATRATE5	tax level 5
11	FINREP_VATRATE6	tax level 6
12	FINREP_VATRATE7	tax level 7
13	FINREP_GROSS1	taxable value 1
14	FINREP_GROSS2	taxable value 2
15	FINREP_GROSS3	taxable value 3
16	FINREP_GROSS4	taxable value 4
17	FINREP_GROSS5	taxable value 5

18	FINREP_GROSS6	taxable value 6
19	FINREP_GROSS7	taxable value 7
20	FINREP_NETTO1	net value 1
21	FINREP_NETTO2	net value 2
22	FINREP_NETTO3	net value 3
23	FINREP_NETTO4	net value 4
24	FINREP_NETTO5	net value 5
25	FINREP_NETTO6	net value 6
26	FINREP_NETTO7	net value 7
27	FINREP_TAX1	tax value 1
28	FINREP_TAX2	tax value 2
29	FINREP_TAX3	tax value 3
30	FINREP_TAX4	tax value 4
31	FINREP_TAX5	tax value 5
32	FINREP_TAX6	tax value 6
33	FINREP_TAX7	tax value 7
34	FINREP_TOTALQUANTITY	Number of fiscal receipts
35	FINREP_TOTALGROSS	Total sale value
36	FINREP_TOTALNETTO	Total net value
37	FINREP_TOTALTAX	Total tax value
38	FINREP_ITEMVOID_COUNT	Number of cancelling
39	FINREP_ITEMVOID_AMOUNT	Value of cancelling
40	FINREP_INVRCPY_COUNT	Number of invalid receipts
41	FINREP_INVRCPY_AMOUNT	Value of invalid receipts
42	FINREP_DISCOUNT_COUNT	Number of discounts
43	FINREP_DISCOUNT_AMOUNT	Value of discounts
44	FINREP_DISCOUNTVOID_COUNT	Number of cancelled discounts
45	FINREP_DISCOUNTVOID_AMOUNT	Value of cancelled discounts
46	FINREP_SURCHARGE_COUNT	Number of surcharges
47	FINREP_SURCHARGE_AMOUNT	Value of surcharges
48	FINREP_SURCHARGEVOID_COUNT	Number of cancelled surcharges
49	FINREP_SURCHARGEVOID_AMOUNT	Value of cancelled surcharges
50	FINREP_REFUND_COUNT	Number of refund
51	FINREP_REFUND_AMOUNT	Value of refund
52	FINREP_REFUNDVOID_COUNT	Number of goods refund cancel
53	FINREP_REFUNDVOID_AMOUNT	Value of good refund cancel
54	FINREP_REDEMP_COUNT	Number of redemption
55	FINREP_REDEMP_AMOUNT	Value of redemption
56	FINREP_REDEMPVOID_COUNT	Number of cancelled redemption
57	FINREP_REDEMPVOID_AMOUNT	Value of cancelled redemption
58	FINREP_SUBTOTALDISCOUNT_COUNT	Number of discounts on subtotal
59	FINREP_SUBTOTALDISCOUNT_AMOUNT	Value of discounts on subtotal
60	FINREP_SUBTOTALDISCOUNTVOID_COUNT	Number of cancelled discounts on subtotal
61	FINREP_SUBTOTALDISCOUNTVOID_AMOUNT	Value of cancelled discounts on subtotal
62	FINREP_SUBTOTALSURCHARGE_COUNT	Number of surcharges on subtotal
63	FINREP_SUBTOTALSURCHARGE_AMOUNT	Value of surcharges on subtotal
64	FINREP_SUBTOTALSURCHARGEVOID_COUNT	Number of cancelled surcharges on subtotal
65	FINREP_SUBTOTALSURCHARGEVOID_AMOUNT	Value of cancelled surcharges on subtotal
66	FINREP_VOIDEDRECEIPT_COUNT	Number of cancelled receipt
67	FINREP_VOIDEDRECEIPT_AMOUNT	Value of cancelled receipt
68	FINREP_CASHIN_COUNT	Number of receive on account operations
69	FINREP_CASHIN_AMOUNT	Value of receive on account operations
70	FINREP_CASHOUT_COUNT	Number of paid out operations

71	FINREP_CASHOUT_AMOUNT	Value of paid out operations
72	FINREP_CASH_COUNT	Number of payment with cash
73	FINREP_CASH_AMOUNT	Value of payment with cash
74	FINREP_CHECK_COUNT	Number of payment with check
75	FINREP_CHECK_AMOUNT	Value of payment with check
76	FINREP_CREDIT_COUNT	Number of payment with credit card
77	FINREP_CREDIT_AMOUNT	Value of payment with credit card
78	FINREP_ROUNDING_COUNT	Number of rounding
79	FINREP_ROUNDING_AMOUNT	Value of rounding

2.1.22 Drawer report (“DRAWERREPORT“)

MemberName	Description
REPORT_VALUE_NAME	value name
REPORT_VALUE	value

record (item) number	ValueName	Description
1	DRWREP_NATCASHPAYMENT_COUNT	Number of payment with cash in local currency
2	DRWREP_NATCASHPAYMENT_AMOUNT	Value of payment with cash in local currency
3	DRWREP_NATCASHDISBURS_COUNT	Number of cash expense in local currency
4	DRWREP_NATCASHDISBURS_AMOUNT	Value of cash expense in local currency
5	DRWREP_FORCASHPAYMENT_COUNT	Number of payment in foreign currency
6	DRWREP_FORCASHPAYMENT_AMOUNT	Value of payment in foreign currency
7	DRWREP_NATCHECKPAYMENT_COUNT	Number of check payment in local currency
8	DRWREP_NATCHECKPAYMENT_AMOUNT	Value of check payment in local currency
9	DRWREP_NATCREDITPAYMENT_COUNT	Number of credit card payment in local currency
10	DRWREP_NATCREDITPAYMENT_AMOUNT	Value of credit card payment in local currency
11	DRWREP_NATCASHLOAN_COUNT	Number of cash receive on account operations in local currency
12	DRWREP_NATCASHLOAN_AMOUNT	Value of cash receive on account operations in local currency
13	DRWREP_NATCASHPICKUP_COUNT	Number of cash paid out operation in local currency
14	DRWREP_NATCASHPICKUP_AMOUNT	Value of cash paid out operation in local currency
15	DRWREP_NATCHECKPICKUP_COUNT	Number of check paid out operation in local currency
16	DRWREP_NATCHECKPICKUP_AMOUNT	Value of check paid out operation in local currency
17	DRWREP_FORCASHPICKUP_COUNT	Number of cash paid out operation in local currency
18	DRWREP_FORCASHPICKUP_AMOUNT	Value of cash paid out operation in local currency
19	DRWREP_NATCASHINDRAWER_AMOUNT	Value of cash in local currency
20	DRWREP_NATCHECKINDRAWER_AMOUNT	Value of check in local currency
21	DRWREP_NATCREDITINDRAWER_AMOUNT	Value of credit in local currency
22	DRWREP_FORCASHINDRAWER_AMOUNT	Value of cash in foreign currency
23	DRWREP_NATCHECKREFUND_COUNT	Number of check refund in local currency
24	DRWREP_NATCHECKREFUND_AMOUNT	Value of check refund in local currency
25	DRWREP_NATCREDITREFUND_COUNT	Number of credit card refund in local

		currency
26	DRWREP_NATCREDITREFUND_AMOUNT	Value of credit card refund in local currency
27	DRWREP_NATCASHPAYMENT_COUNT_MONTH	Monthly number of payment with cash in local currency
28	DRWREP_NATCASHPAYMENT_AMOUNT_MONTH	Monthly value of payment with cash in local currency
29	DRWREP_NATCASHDISBURS_COUNT_MONTH	Monthly number of cash expense in local currency
30	DRWREP_NATCASHDISBURS_AMOUNT_MONTH	Monthly value of cash expense in local currency
31	DRWREP_FORCASHPAYMENT_COUNT_MONTH	Monthly number of payment in foreign currency
32	DRWREP_FORCASHPAYMENT_AMOUNT_MONTH	Monthly value of payment in foreign currency
33	DRWREP_NATCHECKPAYMENT_COUNT_MONTH	Monthly number of check payment in local currency
34	DRWREP_NATCHECKPAYMENT_AMOUNT_MONTH	Monthly value of check payment in local currency
35	DRWREP_NATCREDITPAYMENT_COUNT_MONTH	Monthly number of credit card payment in local currency
36	DRWREP_NATCREDITPAYMENT_AMOUNT_MONTH	Monthly value of credit card payment in local currency
37	DRWREP_NATCASHLOAN_COUNT_MONTH	Monthly number of cash receive on account operations in local currency
38	DRWREP_NATCASHLOAN_AMOUNT_MONTH	Monthly value of cash receive on account operations in local currency
39	DRWREP_NATCASHPICKUP_COUNT_MONTH	Monthly number of cash paid out operation in local currency
40	DRWREP_NATCASHPICKUP_AMOUNT_MONTH	Monthly value of cash paid out operation in local currency
41	DRWREP_NATCHECKPICKUP_COUNT_MONTH	Monthly number of check paid out operation in local currency
42	DRWREP_NATCHECKPICKUP_AMOUNT_MONTH	Monthly value of check paid out operation in local currency
43	DRWREP_FORCASHPICKUP_COUNT_MONTH	Monthly number of cash paid out operation in local currency
44	DRWREP_FORCASHPICKUP_AMOUNT_MONTH	Monthly value of cash paid out operation in local currency
45	DRWREP_NATCASHINDRAWER_AMOUNT_MONTH	Monthly value of cash in local currency
46	DRWREP_NATCHECKINDRAWER_AMOUNT_MONTH	Monthly value of check in local currency
47	DRWREP_NATCREDITINDRAWER_AMOUNT_MONTH	Monthly value of credit in local currency
48	DRWREP_FORCASHINDRAWER_AMOUNT_MONTH	Monthly value of cash in foreign currency
49	DRWREP_NATCHECKREFUND_COUNT_MONTH	Monthly number of check refund in local currency
50	DRWREP_NATCHECKREFUND_AMOUNT_MONTH	Monthly value of check refund in local currency
51	DRWREP_NATCREDITREFUND_COUNT_MONTH	Monthly number of credit card refund in local currency
52	DRWREP_NATCREDITREFUND_AMOUNT_MONTH	Monthly value of credit card refund in local currency

2.1.23 Electronic journal (“JOURNAL”)

MemberName	Description
JOURNAL_LINE	journal line

2.1.24 Transaction log (“TRANSLOG“)

MemberName	Description
TRANSLOG_LINE	transaction log line

2.2 Reports

TAB 2.2.1 List of cash register reports

ReportName	Description
FISCAL_Z	Financial report,
CASHIER_Z	Cashier report
DPT_Z	Department report
PLU_Z	PLU report
DRAWER_Z	Drawer report

Important note: In case that an failure occurs at report execution (ex. current breakdown), after solving the failure will be the report finished.

2.2.1 Financial report

Parameter	Description
REP_PERIOD	periodicity: “DAILY” – daily,

2.2.2 Cashier report

MemberName	Description
REP_PERIOD	periodicity: “DAILY” – daily, “MONTHLY” – monthly
REP_PRINT	print of report: 0 (“NO”) – no, 1 (“YES”) – yes

2.2.3 Department report

MemberName	Description
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REP_PERIOD	periodicity: “DAILY” – <i>daily</i> , “MONTHLY” – <i>monthly</i>
REP_PRINT	print of report: 0 (“NO”) – <i>no</i> , 1 (“YES”) – <i>yes</i>

2.2.4 PLU report

MemberName	Description
REP_PRINT	print of report: 0 (“NO”) – <i>no</i> , 1 (“YES”) – <i>yes</i>
REP_LOWID	First item ID
REP_HIGHID	Last item ID

2.2.5 Drawer report

MemberName	Description
REP_PERIOD	periodicity: “DAILY” – <i>daily</i> , “MONTHLY” – <i>monthly</i>
REP_PRINT	print of report: 0 (“NO”) – <i>no</i> , 1 (“YES”) – <i>yes</i>

3 Additional information

3.1 State of Application and Device

