1. **Frame Format**
   1. **중량 데이터**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Field Name | STX | CMD | ID | LANE | DATE | TIME |
| Length (Byte) | 1 | 2 | 2 | 1 | 8 | 8 |
| Field Name | No | NAME | LOT | UNDER  RANGE | PASS  RANGE | OVER  RANGE |
| Length (Byte) | 4 | 16 | 16 | 7 | 7 | 7 |
| Field Name | TARE  RANGE | TARE GAP  RANGE | TARE  WEIGHT | NET  WEIGHT | GRADE | CHK |
| Length (Byte) | 7 | 7 | 7 | 7 | 1 | 2 |
| Field Name | ETX |  |  |  |  |  |
| Length (Byte) | 1 |  |  |  |  |  |

* Length : 111byte
* STX(0x02), ETX(0x03)
* CMD[2] : 중량 데이터 ("W0")
* ID[2] : Checker ID (Default : "01")
* LANE[1] : 1열 ("1")
* DATE[8] : "yyyyMMdd"
* TIME[8] : "HH:mm:ss
* No[4] : Product Number (ex. '1' 🡪 "0001", '220' 🡪 "0220")
* NAME[16] : Product Name ("Product 1")
* LOT[16] : LOT ("LOT 1")
* UNDER RANGE[7] : 하한 설정값(소수점 포함 7byte) (ex. 123.456🡪 "123.456", "12.3" 🡪 "012.300")
* PASS RANGE[7] : 기준 설정값 (소수점 포함 7byte)
* OVER RANGE[7] : 상한 설정값 (소수점 포함 7byte)
* TARE RANGE[7] : 용기 설정값 (소수점 포함 7byte)
* TARE GAP RANGE[7] : 용기 갭 설정값 (소수점 포함 7byte)
* TARE WEIGHT[7] : 용기중량 판정 (소수점 포함 7byte)
* NET WEIGHT[7] : 실중량 판정 (소수점 포함 7byte)
* GRADE[1] : 판정 등급 ( Over : ‘O’, Pass : ‘P’, Under : ‘U’)
* Checksum[2] : (CMD+ID+LANE+DATE+TIME+No+NAME+LOT+UNDER RANGE+PASS RANGE

+OVER RANGE+TARE RANGE+TARE GAP RANGE+TARE WEIGHT+NET WEIGHT

+GRADE) & 0x00FF

<Refer to Appendix A.>

* 1. **장비 상태**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Field Name | STX | CMD | ID | DATE | TIME | STATUS |
| Length (Byte) | 1 | 2 | 2 | 8 | 8 | 1 |
| Field Name | LOGIN ID | LOGIN  GROUP | CHK | ETX |  |  |
| Length (Byte) | 10 | 1 | 2 | 1 |  |  |

* Length : 30byte
* STX(0x02), ETX(0x03)
* CMD[2] : 장비 상태 ("E0")
* ID[2] : Checker ID (Default : "01")
* DATE[8] : "yyyyMMdd"
* TIME[8] : "HH:mm:ss
* STATUS[1] : 중량체커 상태
* 정지 : "0"
* 운전 : "1"
* LOGIN ID[10] : 로그인 ID (ex. 'Admin' 🡪 " Admin")
* LOGIN GROUP[1] : 로그인 그룹
* Level1 : "1"
* Level2 : "2"
* Level3 : "3"
* Checksum[2] : (CMD+ID+DATE+TIME+STATUS+LOGIN ID+LOGIN GROUP) & 0x00FF

<Refer to Appendix A.>

**<Appendix>**

A. Checksum

* (CMD+ID+DATE+TIME+STATUS+LOGIN ID+LOGIN GROUP) & 0x000000FF
* Conversion high nibble and Low nibbleto ASCII
* ex : (“E0012018081312:34:56 Admin3”)

0x45+0x30+0x30+0x31+0x32+0x30+0x31+0x38+0x2D+0x30+0x38+0x2D+0x31+0x33+

0x31+0x32+0x3A+0x33+0x34+0x3A+0x35+0x36+0x20+0x20+0x20+0x20+0x20+0x41+

0x64+0x6D+0x69+0x6E+0x33 = 0x06D2

0x06D2 & 0x00FF = "0xD2" **(0x44 0x32)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |