# SOFARSOLAR

# ModBus-RTU Communication Protocol

2017-11-27

# 一.General Information

# 二. Instruction

# 2. Modbus Function Format

## 2.1Broadcast data frames information（Address 0x88）

### 2.1.1.Time calibration automatically

| | |
|---|---|
| Slave Address | 0x88 |
| Function Code | 0x02 |
| Register address Hi | 0x50 |
| Register address Lo | 0x00 |
| Register number Hi | 0x00 |
| Register number Lo | 0x03 |
| Data field (second) | |
| Data field (minute) | |
| Data field (hour) | |
| Data field (day) | |
| Data field (month) | |
| Data field (year) | |
| CRC check code Lo | |
| CRC check code Hi | |

Address list of Time calibration automatically

| Address | Define | Variable types | Length | Range | Default value | Remarks |
|---|---|---|---|---|---|---|
| 0x5000 | Time calibration automatically | BCD | | | | |

## 2.2 Packet Format （Function Code 0x03）

Query

| Slave Address | Function Code | Starting Address | Number of Registers | CRC16 |
|---|---|---|---|---|
| 1 byte | 1 byte | 2 bytes | 2 bytes | 2 bytes |
| 0xxx | 0xxx | Hi Byte Lo Byte | Hi Byte Lo Byte | Lo Byte Hi Byte |

Response

| Slave Address | Function Code | Byte Count | Register-1 value | ... | Register-N value | CRC16 |
|---|---|---|---|---|---|---|
| 1 byte | 1 byte | 1 byte | 2 bytes | N-2 | 2 bytes | 2 bytes |
| Byte | Byte | Byte | Hi Byte Lo Byte | ... | Hi Byte Lo Byte | Lo Byte Hi Byte |

request：

| | |
|---|---|
| Slave Address | 0x01 |
| Function Code | 0x03 |
| Register address Hi | 0x00 |
| Register address Lo | 0x00 |
| Register number Hi | 0x00 |
| Register number Lo | 0x01 |
| CRC check code Lo | 0x84 |
| CRC check code Hi | 0x0A |

response：

| | |
|---|---|
| Slave Address | 0x01 |
| Function Code | 0x03 |
| number of bytes | 0x02 |
| Register value Hi | 0x00 |
| Register value Lo | 0x00 |
| CRC check code Lo | 0xB8 |
| CRC check code Hi | 0x44 |

## 2.2.2Read storage inverter address list

**Fault Message：**

Byte0

| bit | Error Message | ID code(detailed) |
|---|---|---|
| Bit0 | GridOVP | ID01 Grid Over Voltage Protection |
| Bit1 | GridUVP | ID02 Grid Under Voltage Protection |
| Bit2 | GridOFP | ID03 Grid Over Frequency Protection |
| Bit3 | GridUFP | ID04 Grid Under Frequency Protection |
| Bit4 | BatOVP | ID05 Battery Over Voltage |

| | | |
|---|---|---|
| | | Protection |
| Bit5 | reserved | reserved ID06 |
| Bit6 | reserved | reserved ID07 |
| Bit7 | reserved | reserved ID08 |

Byte1

| bit | Error Message | ID code(detailed) |
|---|---|---|
| Bit0 | HW_LLCBus_OVP | LLCBus Over Voltage Hardware Protection ID09 |
| Bit1 | HW_Boost_OVP | Bus Over Voltage Hardware Protection ID10 |
| Bit2 | HwBuckBoostOCP | BuckBoost over Current Hardware Protection ID11 |
| Bit3 | HwBatOCP | Battery over Current Hardware Protection ID12 |
| Bit4 | reserved | reserved ID13 |
| Bit5 | reserved | reserved ID14 |
| Bit6 | HwAcOCP | Output Current Hardware Protection |
| Bit7 | reserved | reserved ID16 |

Byte2

| bit | Error Message | ID code(detailed) |
|---|---|---|
| Bit0 | HwADFaultIGrid | The Grid current sampling is error ID17 |
| Bit1 | HwADFaultDCI | The DCI sampling is error ID18 |
| Bit2 | HwADFaultVGrid | The Grid voltage sampling is error ID19 |
| Bit3 | reserved | Reserved ID20 |
| Bit4 | MChip_Fault | Main chip fault ID21 |
| Bit5 | HwAuxPowerFault | Hardware auxiliary power fault ID22 |
| Bit6 | reserved | Reserved ID23 |
| Bit7 | reserved | reserved ID24 |

Byte3

| bit | Error Message | ID code(detailed) |
|---|---|---|
| Bit0 | LLCBusOVP | LLCBus Over Current protection ID25 |
| Bit1 | SwBusOVP | Bus Over Voltage software protection ID26 |
| Bit2 | BatOCP | Battery Over Current protection ID27 |
| Bit3 | DciOCP | Dci Over Current Protection ID28 |
| Bit4 | SwOCPInstant | Output over current software protection ID29 |
| Bit5 | BuckOCP | Buck Over Current Protection ID30 |

| | | |
|---|---|---|
| Bit6 | AcRmsOCP | Output over current protection ID31 |
| Bit7 | reserved | Reserved ID32 |

Byte4

| bit | Error Message | |
|---|---|---|
| Bit0 | reserved | Reserved ID33 |
| Bit1 | reserved | Reserved ID34 |
| Bit2 | reserved | Reserved ID35 |
| Bit3 | reserved | Reserved ID36 |
| Bit4 | reserved | Reserved ID37 |
| Bit5 | reserved | Reserved ID38 |
| Bit6 | reserved | Reserved ID39 |
| Bit7 | reserved | Reserved ID40 |

Byte5

| bit | | |
|---|---|---|
| Bit0 | reserved | Reserved ID41 |
| Bit1 | reserved | Reserved ID42 |
| Bit2 | reserved | Reserved ID43 |
| Bit3 | reserved | Reserved ID44 |
| Bit4 | reserved | Reserved ID45 |
| Bit5 | reserved | Reserved ID46 |
| Bit6 | reserved | Reserved ID47 |
| Bit7 | reserved | Reserved ID48 |

Byte6

| bit | | |
|---|---|---|
| Bit0 | ConsistentFault_VGrid | The grid voltage sampling value between the master and slave DSP is Vary widely ID49 |
| Bit1 | ConsistentFault_FGrid | The grid frequency sampling value between the master and slave DSP is Vary widely ID50 |
| Bit2 | ConsistentFault_DCI | The DCI sampling value between the master and slave DSP is Vary widely ID51 |
| Bit3 | BatCommunicatonFlag | Battery communication fault ID52 |
| Bit4 | SpiCommLose | SPI communication fault ID53 |
| Bit5 | SciCommLose | SCI communication fault ID54 |
| Bit6 | RecoverRelayFail | The relay is fault ID55 |
| Bit7 | reserved | Reserved ID56 |

Byte7

| bit | | |
|---|---|---|
| Bit0 | OverTempFault_BAT | The inverter temp is too high ID57 |
| Bit1 | OverTempFault_HeatSink | The boost temp is too high ID58 |
| Bit2 | OverTempFault_Env | The environment temp is too high |

| | | |
|---|---|---|
| | | ID59 |
| Bit3 | reserved | Reserved ID60 |
| Bit4 | reserved | Reserved ID61 |
| Bit5 | reserved | Reserved ID62 |
| Bit6 | reserved | Reserved ID63 |
| Bit7 | reserved | Reserved ID64 |

Byte8

| bit | | |
|---|---|---|
| Bit0 | unrecoverHwAcOCP | The grid current is too high,and has cause unrecoverable fault ID65 |
| Bit1 | unrecoverBusOVP | The bus voltage is too high,and has cause unrecoverable fault ID66 |
| Bit2 | BitEPSunrecoverBatOcP | EPS Mode Battery Over current,and has cause unrecoverable fault ID67 |
| Bit3 | reserved | Reserved ID68 |
| Bit4 | reserved | Reserved ID69 |
| Bit5 | unrecoverOCPInstant | The Output current is too high,and has cause unrecoverable faultID70 |
| Bit6 | reserved | Reserved ID71 |
| Bit7 | reserved | Reserved ID72 |

Byte9

| bit | | |
|---|---|---|
| Bit0 | reserved | ID73 |
| Bit1 | reserved | ID74 |
| Bit2 | unrecoverEEPROM_W | Write EEPROM unrecoverable fault ID 75 |
| Bit3 | unrecoverEEPROM_R | Read EEPROM unrecoverable fault ID 76 |
| Bit4 | unrecoverRelayFail | The relay is fault, and has cause unrecoverable fault ID 77 |
| Bit5 | reserved | Reserved 78 |
| Bit6 | reserved | Reserved 79 |
| Bit7 | reserved | Reserved 80 |

**Inverter alert message Message：**

byte0

| bit | | |
|---|---|---|
| Bit0 | OverTempAlarmLoadShedding | The inverter has derated because of the temperature is too high ID81 |
| Bit1 | OverFreqAlarmLoadShedding | inverter has derated because of the grid frequency is too high ID82 |
| Bit2 | bitlongdistLoadShedding | inverter has derated by remote |

| | | |
|---|---|---|
| | | control ID83 |
| Bit3 | bitlongdistOFF | inverter has shut down by remote control ID84 |
| Bit4 | reserved | reserved |
| Bit5 | reserved | reserved |
| Bit6 | reserved | reserved |
| Bit7 | batLowVoltageAlarm | Battery Low Voltage Alert ID85 |

**Inverter alert message：byte1**

| bit | | |
|---|---|---|
| Bit0 | reserved | reserved |
| Bit1 | reserved | reserved |
| Bit2 | reserved | reserved |
| Bit3 | reserved | reserved |
| Bit4 | reserved | reserved |
| Bit5 | reserved | reserved |
| Bit6 | reserved | reserved |
| Bit7 | reserved | reserved |

**Communication board inner message：byte0**

| bit | | |
|---|---|---|
| Bit0 | reserved | Reserved ID91 |
| Bit1 | reserved | Reserved ID92 |
| Bit2 | reserved | Reserved ID93 |
| Bit3 | Software version is not consistent | Software version is not consistent ID94 |
| Bit4 | CommEEPROMFault | The communication board EEPROM is fault ID95 |
| Bit5 | RTCFault | RTC clock chip is fault ID96 |
| Bit6 | InValidCountry | The country is invalid ID97 |
| Bit7 | SDfault | The SD card is fault ID98 |

**Communication board inner message：byte1**

| bit | | |
|---|---|---|
| Bit0 | reserved | reserved |
| Bit1 | reserved | reserved |
| Bit2 | reserved | reserved |
| Bit3 | reserved | reserved |
| Bit4 | reserved | reserved |
| Bit5 | reserved | reserved |
| Bit6 | reserved | reserved |
| Bit7 | reserved | reserved |

Battery fault message list：byte0

| bit | | |
|---|---|---|
| Bit0 | BatOCD | Discharge over current protection ID100 |
| Bit1 | BatSCD | Discharge short-circuit |

| | | |
|---|---|---|
| | | protection ID101 |
| Bit2 | BatOV | Battery over voltage protection ID102 |
| Bit3 | BatUV | Battery under voltage protection ID103 |
| Bit4 | BatOTD | Discharge over temperature protection ID104 |
| Bit5 | BatOTC | Charge over temperature protection ID105 |
| Bit6 | BatUTD | Discharge under temperature protection ID106 |
| Bit7 | BatUTC | Charge under temperature protection ID107 |

Battery fault message list：byte1 －byte9

| bit | | |
|---|---|---|
| Bit0 | reserved | reserved |
| Bit1 | reserved | reserved |
| Bit2 | reserved | reserved |
| Bit3 | reserved | reserved |
| Bit4 | reserved | reserved |
| Bit5 | reserved | reserved |
| Bit6 | reserved | reserved |
| Bit7 | reserved | reserved |

Country code list：

| | | | |
|---|---|---|---|
| 00 | Germany VDE4105 | 01 | CEI0-21 Internal |
| 02 | Australia | 03 | Spain RD1699 |
| 04 | Turkey | 05 | Denmark |
| 06 | Greece Continent | 07 | Netherland |
| 08 | Belgium | 09 | UK-G59 |
| 10 | China | 11 | France |
| 12 | Poland | 13 | Germany BDEW |
| 14 | Germany VDE0126 | 15 | Italy CEI0-16 |
| 16 | UK G83 | 17 | Greece island |
| 18 | EU EN50438 | 19 | EU EN61727 |
| 20 | Korea | 21 | Sweden |
| 22 | Europe General | 23 | CEI0-21 External |
| 24 | Cyprus | 25 | India |
| 26 | Philippines | 27 | NewZealand |
| 28 | Reserve | 29 | Reserve |

Running state：

| | |
|---|---|
| 0： WaitState | waiting state |
| 1：CheckState | charging check state |
| 2：NormalState | charging state |
| 3：CheckDischargeState | discharging check state |
| 4：DischargeState | discharging state |
| 5：EPSState | EPS state |
| 6：FaultState | fault state |
| 7：PermanentState | permanent fault state |

Storage inverter date address list

| Address | Define | Variable types | Length | Range | Default value | |
|---|---|---|---|---|---|---|
| 0x0200 | Running state | | | | | |
| 0x0201 | Fault message list 1 | Uint | 16 | | | High-Byte:byte1,Low-Byte:byte0 |
| 0x0202 | Fault message list 2 | Uint | 16 | | | High-Byte:byte3,Low-Byte:byte2 |
| 0x0203 | Fault message list 3 | Uint | 16 | | | High-Byte:byte5,Low-Byte:byte4 |
| 0x0204 | Fault message list 4 | Uint | 16 | | | High-Byte:byte7,Low-Byte:byte6 |
| 0x0205 | Fault message list 5 | Uint | 16 | | | High-Byte:byte9,Low-Byte:byte8 |

| Address | Define | Variable types | Length | Range | Default value | unit |
|---|---|---|---|---|---|---|
| 0x0206 | Grid A Voltage | Uint | 16 | 0-1000V | | 0.1V |
| 0x0207 | Grid A Current | int | 16 | -20-20A | | 0.01A |
| 0x0208 | Grid B Voltage | Uint | 16 | 0-1000V | | 0.1V |
| 0x0209 | Grid B Current | int | 16 | -20-20A | | 0.01A |
| 0x020A | Grid C Voltage | Uint | 16 | 0-1000V | | 0.1V |
| 0x020B | Grid C Current | int | 16 | -20-20A | | 0.01A |
| 0x020C | Grid Frequency | Uint | 16 | 0-1000V | | 0.01Hz |
| 0x020D | Charge/Discharge power | int | 16 | -10-10 KW | | 0.01KW |
| 0x020E | Battery Voltage | Uint | 16 | 0-100V | | 0.1V |
| 0x020F | Battery Charge/Discharge current | int | 16 | -100-100 A | | 0.01A |
| 0x0210 | The residual capacity of battery | Uint | 16 | 0-100 | | 1% |
| 0x0211 | Battery | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | temperature | | | | | |
| 0x0212 | Feed in/out power | int | 16 | -10-10 KW | | 0.01KW |
| 0x0213 | The power of the load | Uint | 16 | 0-10 KW | | 0.01KW |
| 0x0214 | Input/Output power | Int | 16 | -10-10KW | | 0.01KW |
| 0x0215 | The power of generation | Uint | 16 | 0-10 KW | | 0.01KW |
| 0x0216 | EPS output voltage | Uint | 16 | | | 0.1V |
| 0x0217 | EPS output power | Uint | 16 | | | 0.01KW |
| 0x0218 | Generation of one day | Uint | 16 | 0-65536 | | 0.01KWh |
| 0x0219 | The power sell to grid of today | Uint | 16 | 0-65536 | | 0.01KWh |
| 0x021A | The power buy from grid of today | Uint | 16 | 0-65536 | | 0.01KWh |
| 0x021B | Today consumption of the load | Uint | 16 | 0-65536 | | 0.01KWh |
| 0x021C | Total generation High-Byte | Uint | 16 | 0-65536 | | 1KWh |
| 0x021D | Total generation Low-Byte | Uint | 16 | 0-65536 | | 1KWh |
| 0x021E | Total power sell to grid,High-Byte | Uint | 16 | 0-65536 | | 1KWh |
| 0x021F | Total power sell to grid,Low-Byte | Uint | 16 | 0-65536 | | 1KWh |
| 0x0220 | Total energy buy from grid,High-Byte | Uint | 16 | 0-65536 | | 1KWh |
| 0x0221 | Total energy buy from grid,Low-Byte | Uint | 16 | 0-65536 | | 1KWh |
| 0x0222 | Total consumption of the load,High-Byte | Uint | 16 | 0-65536 | | 1KWh |
| 0x0223 | Total | Uint | 16 | 0-65536 | | 1KWh |

| | | | | | | |
|---|---|---|---|---|---|---|
| | consumption of the load,Low-Byte | | | | | |
| 0x0224 | reserved | | | | | |
| 0x0225 | reserved | | | | | |
| 0x0226 | reserved | | | | | |
| 0x0227 | reserved | | | | | |
| 0x0228 | reserved | | | | | |
| 0x0229 | reserved | | | | | |
| 0x022A | The countdown time | Uint | 16 | | | |
| 0x022B | Inverter alert message | Uint | 16 | | | |
| 0x022C | Battery cycle times | Uint | 16 | 0-65536 | | |
| 0x022D | INV bus voltage | int | 16 | | | 0.01A |
| 0x022E | LLC bus voltage | Uint | 16 | | | |
| 0x022F | Buck current | Uint | 16 | | | |
| 0X0230 | Grid R Voltage | Uint | 16 | | | 0.1V |
| 0X0231 | Grid R Current | Uint | 16 | | | 0.01A |
| 0X0232 | Grid S Voltage | Uint | 16 | | | 0.1V |
| 0X0233 | Grid S Current | Uint | 16 | | | 0.01A |
| 0X0234 | Grid T Voltage | Uint | 16 | | | 0.1V |
| 0X0235 | Grid T Current | Uint | 16 | | | 0.01A |
| 0X0236 | Generation current | Uint | 16 | 0-100 | | |
| 0X0237 | Battery power | int | 16 | | | reserved |
| 0X0238 | Inner temperature | int | 16 | -127-127 | | 1℃ |
| 0X0239 | Heat sink temperature | int | 16 | -127-127 | | 1℃ |
| 0X023A | Country | Uint | 16 | | | |
| 0X023B | Current dc component | int | 16 | | | 1mA |
| 0X023C | Voltage dc component | int | 16 | | | 0.1V |
| 0X023D | Battery fault message 1 | Uint | 16 | | | High-Byte:byte1,Low-Byte:byte0 |
| 0X023E | Battery fault message 2 | Uint | 16 | | | High-Byte:byte3,Low-Byte:byte2 |
| 0X023F | Battery fault message 3 | Uint | 16 | | | High-Byte:byte5,Low-Byte:byte4 |
| 0X0240 | Battery fault message 4 | Uint | 16 | | | High-Byte:byte7,Low-Byte:byte6 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 0x0241 | Battery fault message 5 | Uint | 16 | | | High-Byte:byte9,Low-Byte:byte8 |
| 0x0242 | Communication board inner message | Uint | 16 | | | High-Byte:byte1,Low-Byte:byte0 |
| 0x0243 | Today generation time | Uint | 16 | | | 1min |
| 0x0244 | Total generation time High-Byte | Uint | 16 | | | 1hour |
| 0X0245 | Total generation time,Low-Byte | Uint | 16 | | | 1hour |

## 2.3 Read command2（function code0x04）

### 2.3.1Read the data format

Request：

| Slave Address | Function Code | Starting Address | Number of Registers | CRC16 |
|---|---|---|---|---|
| 1byte | 1byte | 2bytes | 2bytes | 2bytes |
| Byte | Byte | Hi Byte Lo Byte | Hi Byte Lo Byte | Hi Byte Hi Byte |

Request：

| Slave Address | Function Code | Byte Count | Register-1 value | ◦ ◦ ◦ | Register-N value | CRC16 |
|---|---|---|---|---|---|---|
| 1byte | 1byte | 1byte | 2bytes | N-2 | 2bytes | 2bytes |
| Byte | Byte | Byte | Hi Byte Lo Byte | ◦ ◦ ◦ | Hi Byte Lo Byte | Lo Byte Hi Byte |

Example request：

| | |
|---|---|
| Address of device | 0x01 |
| Function code | 0x04 |
| address of register (Hi) | 0x10 |
| address of register (Lo) | 0x00 |
| number of register (Hi) | 0x00 |
| number of register (Lo) | 0x01 |
| CRC check code (Lo) | 0x35 |
| CRC check code (Hi) | 0x0A |

response：

| | |
|---|---|
| Address of device | 0x01 |

| | |
|---|---|
| Function code | 0x04 |
| The amount of bytes | 0x02 |
| value of register (Hi) | 0x00 |
| value of register (Lo) | 0x00 |
| CRC Check code Lo | 0xB9 |
| CRC Check code Hi | 0x30 |

## 2.3.2Read inverter setting parameters address list

| Battery parameter register | | | | | | | |
|---|---|---|---|---|---|---|---|
| Address | Define | Variable types | Length | Range | Default value | Remarks: | |
| 0x10B0 | Battery type | Uint | 16 | | | V1.00:<br>0x0000—DARFON<br>0x0001—PYLON<br>0x0003—SOLTARO<br>0x0080—TELE<br>0x0100—DEFAULT<br>V1.20:<br>0x0000—DARFON<br>0x0001—PYLON<br>0x0002—SOLTARO<br>0x0003—ALPHA.ESS<br>0x0004—GENERAL<br>0x0100—DEFAULT | |
| 0x10B1 | Battery capacity | Uint | 16 | 0-999 Ah | | Unit：1Ah | |
| 0x10B2 | Energy management model | Uint | 16 | | | reserved | |
| 0x10B3 | Max charge voltage | Uint | 16 | 50.0-58.0V | | Unit：0.1V | |
| 0x10B4 | Max charge current | Uint | 16 | 0-65.00A | | Unit：0.01A | |
| 0x10B5 | Over voltage protection | Uint | 16 | 50.0-58.5V | | Unit：0.1V | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | point | | | | | | |
| 0x10B6 | Min discharge voltage | Uint | 16 | 42.0-52.0V | | Unit：0.1V | |
| 0x10B7 | Max discharge current | Uint | 16 | 0-70.00A | | Unit：0.01A | |
| 0x10B8 | Under voltage protection point | Uint | 16 | 42.0-52.0V | | Unit：0.1V | |
| 0x10B9 | Discharge depth | Uint | 16 | 0-100 % | | Unit：1% | |
| 0x10B4 | Periods of discharge time | Uint | 16 | 0-24h | | reserved | |
| 0x10BB | Empty battery voltage | Uint | 16 | 42.50-47.00 V | | Unit：0.01V | |
| 0x10BC | Full battery voltage | Uint | 16 | 47.01-55.00 V | | Unit：0.01V | |

## 2.3.3Read inverter information address list

| Inverter information | | | | | | |
|---|---|---|---|---|---|---|
| Address | define | Variable types | Length | Range | Default value | |
| 0x2000 | Production code | | | | | |
| 0x2001~0x2007 | S/N number | | | | | |
| 0x2008~0x2009 | Software version | | | | | |
| 0x200A~0x200B | Hardware version | | | | | |
| 0x200C~0x200F | reserved | | | | | |

S/N definition list：

| ID | Value | |
|---|---|---|
| 1 | ‘S’ | sofar |
| 2-3 | “A1” or” M1” or” C1” | A1 (1.1-6kW, M1 Micro-inverter, C1 10-20kW, D1 30-40kW, E1 |

| | | |
|---|---|---|
| | | storage inverter) |
| 4 | E/U | E（Europe，Australian，China），U(America) |
| 5-6 | "S0"or”S1”or”S2”or”"S3"or”S4”or”S5”or”S6” | |
| 7-8 | | |
| 9 | YEAR（2000-2035） | 00（0）01（1）02（2）03（3）04（4）05（5）06(6)07（7）08（8）09（9）10（A）11（B）12（C）13（D）14（E）15（F）16（G）17（H）18（I）19（J）20（K）21（L）22（M）23（N）24（O）25（P）2（Q）27（R）28（S）29（T）30（U）31（V）32（W）33（X）34年（Y）35years（Z） |
| 10 | MONTH | 1month(1)2month(2)3month（3）4month（4）<br>5月month5）6month（6）<br>7month（7）8month（8）<br>9month（9）10month（A）<br>11month（B）12month（C） |
| 11 | DAY | 1th（1）2th（2）3th（3）4th（4）<br>5th（5）6th（6）7th（7）8th（8）<br>9th(9)10th(A)11th(B)12th（C）<br>13th(D)14th(E)15th(F)16th（G）<br>17th(H)18th(I)19th(J)20th（K）<br>21th(L)22th(M)23th(N)24th（O）<br>25th(P)26th(Q)27th(R)28th（S）<br>29th(T)30th(U)31th(V) |
| 12-14 | xxx | 001（The numbers of that day） |