

Wireless Gateway

Connection Guide

WW-5C20



減少電磁波影響，請妥適使用

- 本設備-支援LTE上行703 MHz - 748 MHz；下行758 MHz - 803 MHz。
- 本設備-支援LTE上行885 MHz - 915 MHz；下行930 MHz - 960 MHz。
- 本設備-支援LTE上行1710 MHz - 1785 MHz；下行1805 MHz - 1880 MHz。
- 本設備-支援LTE上行1920 MHz - 1980 MHz；下行2110 MHz - 2170 MHz。

低功率電波輻射性電機管理辦法

第十二條

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

NOTED

- *AUX port cable outside diameter needs to be between 3~7 mm.
- *When all cable gland fixing head are not wired, the inner cable gland sealing plug rod can be installed first to avoid dust and water infiltration.



WARNING

To reduce the risk associated with all applicable hazards:

- *Read and follow all safety information contained in the installation instructions and Product Safety Guide Prior to installing, using or servicing the wall mount. Retain these instructions for future reference.

To reduce the risk associated with choking:

- *Do not allow children access to small parts and / or packaging materials.
- *Do not modify the physical aspects of the wall mount.
- *Do not install on a mounting structure or surface that is prone to vibration, movement or chance of being impacted.
- *Proper installation and servicing must be performed by experienced installers as outlined in the installation instructions.

To reduce the risk associated with impact:

- *The EQUIPMENT is required hardware when installing the EQUIPMENT Mount onto concrete block walls and stud walls.
- *Do not climb on, hang on or place any added weight other than the EQUIPMENT on the fixed or folding wall mount.



A symbol such as ISO 7000-0434 (2004-01) or a combination of this symbol and ISO 7000-1641 (2004-01) to refer to text in an accompanying document. These symbols may be combined.

Indicator

Status Indicator	Reserved
Power Indicator	Red light stay on: Error status. Green light stay on: Power ready. Green light flashing: NB-IoT connection. Yellow light flashing: Main part entry boot mode. Green + Yellow lights flashing: Entry setup mode.

Interface



- ❶ DC in+: 12V to 36V DC / 1A
 - ❷ DC in-: GND
 - ❸ DC out+: 5V DC / 200mA
 - ❹ DC out-: GND
 - ❺ RS-485 A: Non-isolator differential interface, Data-
 - ❻ RS-485 B: Non-isolator differential interface, Data+
 - ❼ A / D input:
Analog Input Support 0~10 V / 0~20 mA / 4~20 mA / ADC (0~10 V)
Digital Input Support High / Low Signal Judge
 - ❽ D output: Digital Output support PWM / Latch Mode
- Antenna Connector: RP-SMA-Female

■ Specification

Product Type	Outdoor
Air Stream Protocol	NB-IoT (LTE Cat NB1 3GPP Release 13)
NB-IoT Protocol	TCP / UDP / MQTT / Line Notify / AWS / Google Apps Script
Operating LTE Bands	Band 1 / Band 3 / Band 5 / Band 8 / Band 20 / Band 28
Sensitivity	Maximum -116dBm
Transmit RF Power	Maximum 23 dBm (Class 3)
Cellular Data Rate	NB1 (26.15 kbit/s DL, 62.5 kbit/s UL)
Interface	RS-485 x 1 / Analog or Digital Input x 1 / Digital Output x 1
RS-485 Protocol	Modbus RTU
Serial Interface Baud Rate	1200bps / 2400bps / 4800bps / 9600bps / 19200bps / 38400bps / 57600bps / 115200bps / 230400bps
Analog Input	Analog Input Support 0~10 V / 0~20 mA / 4~20 mA / ADC (0~10 V)
Digital Input	Digital Input Support High / Low Signal Judge
Digital Output	Digital Output Support PWM / Latch Mode
Operating Temperature	-40°C ~ 85°C
Main Unit Dimensions	10 x 10 x 4.8 cm (Not include antenna and external connect)
Weight	195 g
Waterproof	IP 68
Input Power Supply	12V ~ 36V DC / 1A
Output Power Supply	5V DC / 200mA (Max.)
Power Consumption	12V 15mA @receive / 12V 200mA @transmit / 12V ≤ 1mA @standby
Special Specification	Flame Retardant

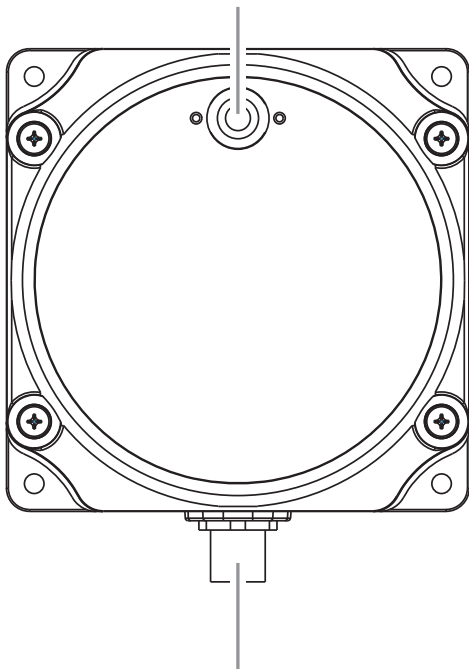
* Support Setup or firmware update function via RS-485 interface.

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Introduction

Antenna Connector



Interface

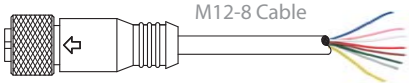
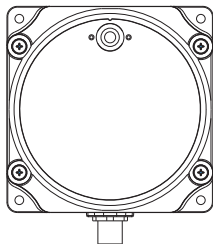
Cable Define

I M12-8 Cable



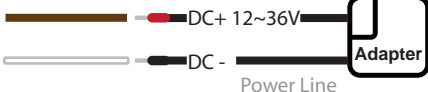
Pin Define	Cord end Terminal Color	Pin Function
1	Brown	DC in+
2	White	DC in-
3	Green	DC out+
4	Red	DC out-
5	Yellow	RS-485 A
6	Gray	RS-485 B
7	Blue	A/D input
8	Pink	D output

Connect the PC



M12-8 Cable

Brown ① DC in+



White ② DC in-

Green ③ DC out+

Red ④ DC out-

Yellow ⑤ RS-485 A



Gray ⑥ RS-485 B



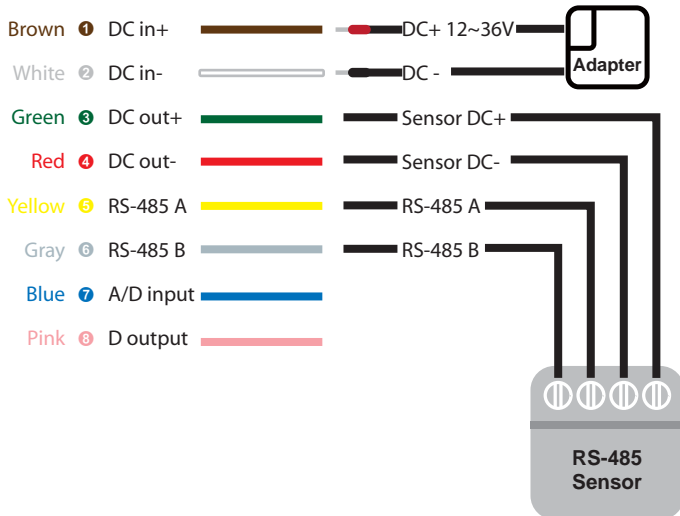
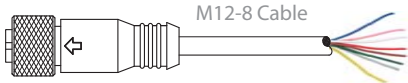
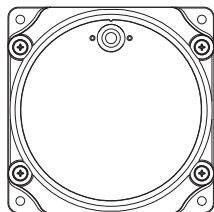
Blue ⑦ A/D input



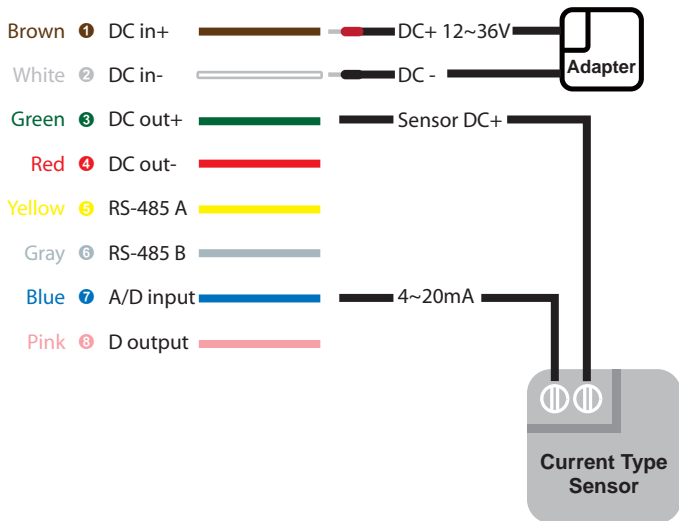
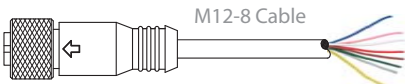
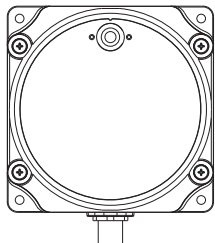
Pink ⑧ D output



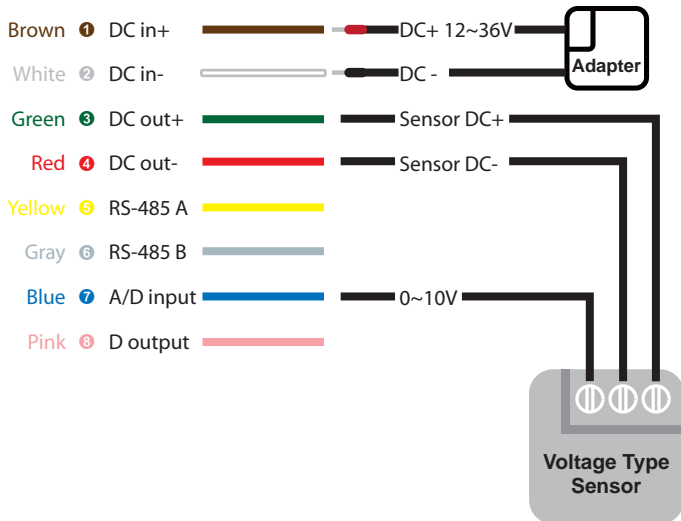
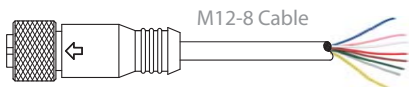
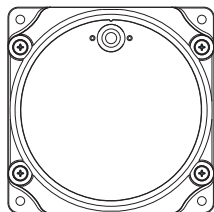
Connect the RS-485 Sensor



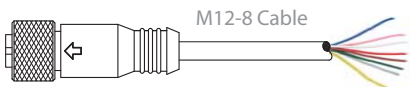
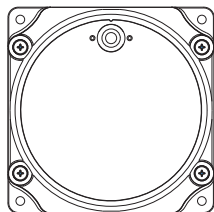
Connect the 0~20mA / 4~20mA Sensor



Connect the 0~10V Sensor



Connect the Driver / Controller



Brown ① DC in+

White ② DC in-

Green ③ DC out+

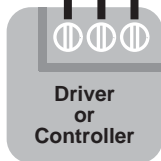
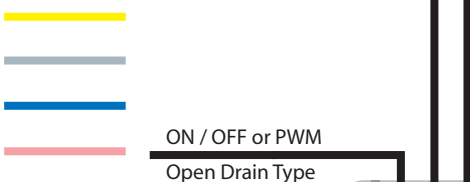
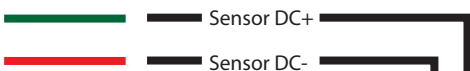
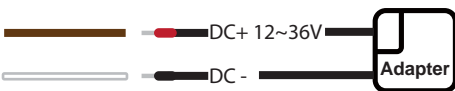
Red ④ DC out-

Yellow ⑤ RS-485 A

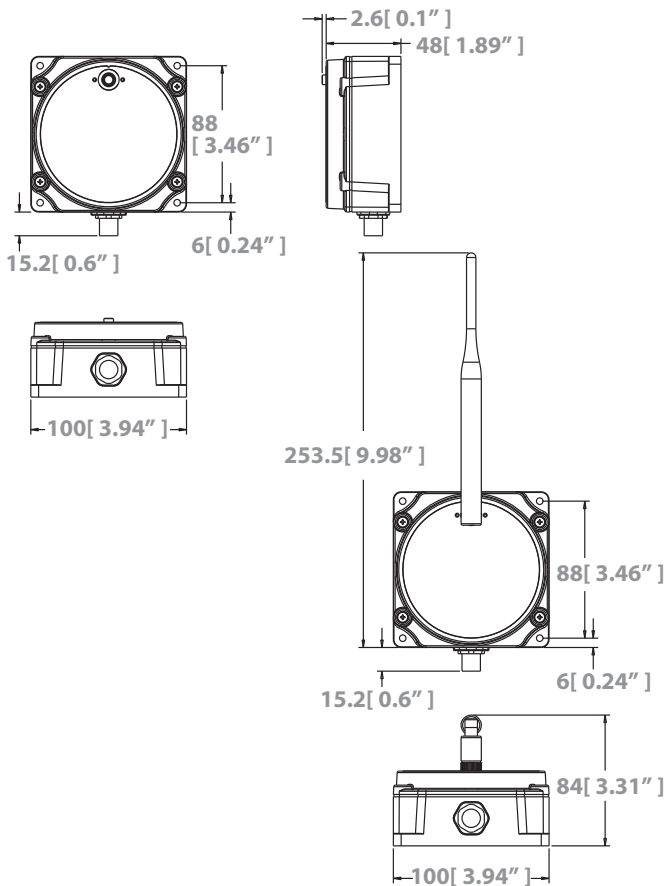
Gray ⑥ RS-485 B

Blue ⑦ A/D input

Pink ⑧ D output





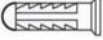
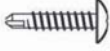


Dimensions



Installation Guide




■ Screw List

Item	Description	Spec	Units
① 	Phillips Mechanical Stainless Steel Metal Screw	M4*20mm	4
② 	Spring Washer	M4	4
③ 	Hex Nut	M4	4
④ 	Phillips Self Tapping Stainless Steel Metal Screw	M4	4
⑤ 	Nylon Hammer Drive Anchor	1/4*1	4
⑥ 	Self-Drilling Screw	8#3/4	4

■ Installation Guide


To install the lock screw sequence, it is recommended to use the upper right → upper left → lower left → lower right mode to avoid falling.

The following parts can be used when installed on a device that has been drilled first.



Item	Description	Spec	Units
① 	Phillips Mechanical Stainless Steel Metal Screw	M4*20mm	4
② 	Spring Washer	M4	4
③ 	Hex Nut	M4	4

After piercing the screw, put on the spring washer and nut and lock it.

The following parts can be used when installed on a wooden wall.

Item	Description	Spec	Units
④ 	Phillips Self Tapping Stainless Steel Metal Screw	M4	4

The following parts can be used when installed on a concrete wall.

Item	Description	Spec	Units
④ 	Phillips Self Tapping Stainless Steel Metal Screw	M4	4
⑤ 	Nylon Hammer Drive Anchor	1/4*1	4

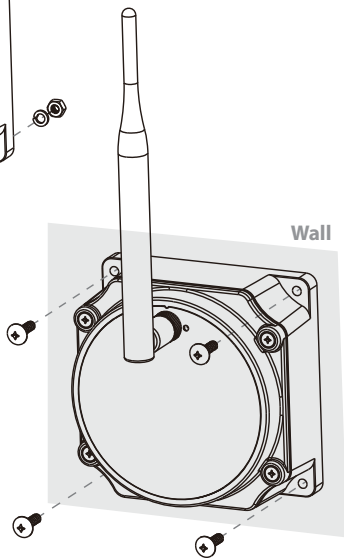
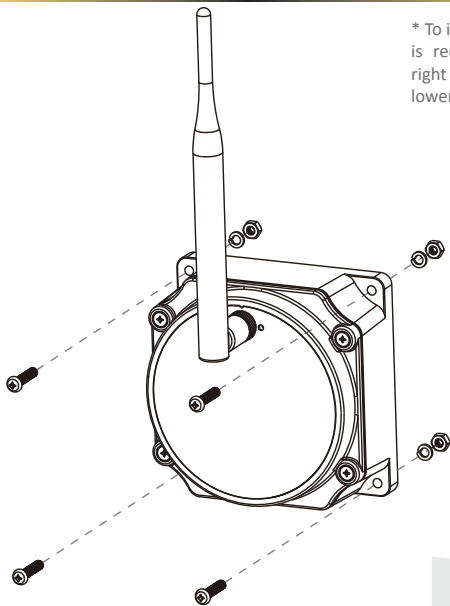
Please drill first (aperture 6mm depth 20mm), put it into the nylon hammer drive anchor, then lock the screw.

The following parts can be used when installed on a metal wall.

Item	Description	Spec	Units
⑥ 	Self-Drilling Screw	8#3/4	4

Assembling

* To install the lock screw sequence, it is recommended to use the upper right → upper left → lower left → lower right mode to avoid falling.



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