Communication Module
for Digital Water Meter

CC130

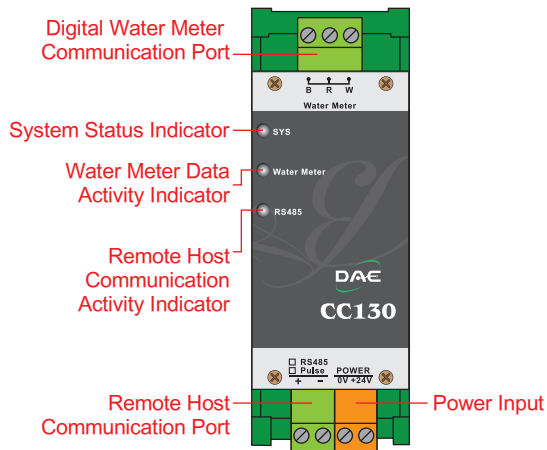## Installation Guide

1 Warnings & Precautions

⚠ Danger

To reduce the risk of electric shock, turn off all sources of electrical power to the device during installation or wiring.
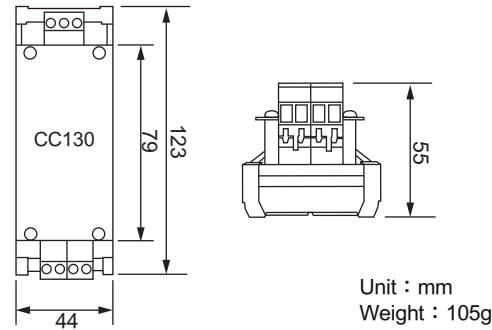
⚠ Warnings

- Install only by a qualified and trained personnel.
- Follow these instructions accordingly, otherwise damage may occur to the device.
- Follow electrical rules and regulations in the selection of wire materials and gauges.
- Avoid having oil, water, metallic powder or other foreign substances enter the device.
- Avoid using the device in environments where it will be exposed to steam, corrosive, or flammable substances; which can cause short circuits, fires, or explosions.
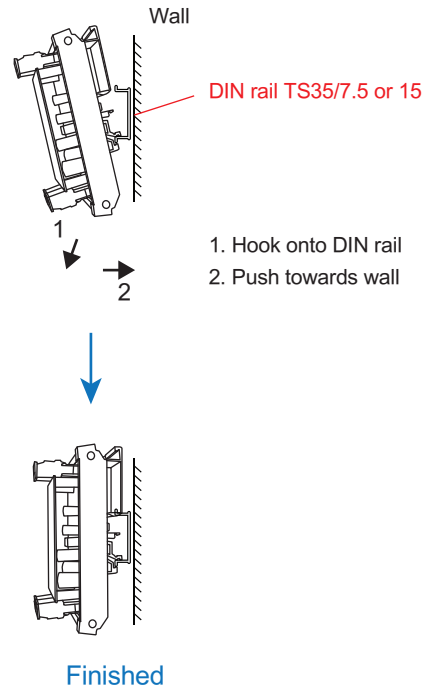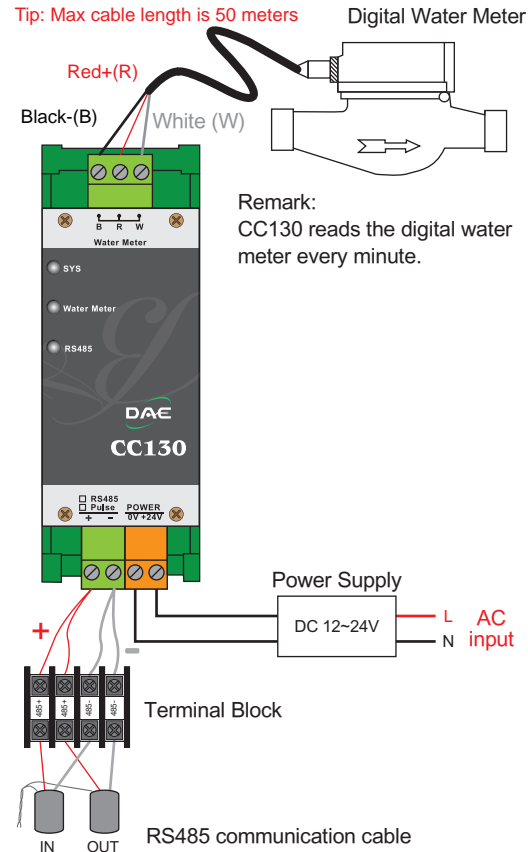
2 Front Panel & Terminals

- Digital Water Meter Communication Port
- System Status Indicator
- Water Meter Data Activity Indicator
- Remote Host Communication Activity Indicator
- Remote Host Communication Port
- Power Input

B R W
Water Meter
SYS
Water Meter
RS485
DAE
CC130
RS485 / Pulse   POWER
+ –   0V +24V

3 Dimensions

CC130

123
79
44
55

Unit：mm
Weight：105g

4 Mounting

Wall

DIN rail TS35/7.5 or 15

1
2

1. Hook onto DIN rail
2. Push towards wall

Finished

5 Wiring Diagram

Tip: Max cable length is 50 meters

Digital Water Meter

Red+(R)
Black-(B)   White (W)

B R W
Water Meter
SYS
Water Meter
RS485
DAE
CC130
RS485 / Pulse   POWER
+ –   0V +24V

Remark:
CC130 reads the digital water meter every minute.

Power Supply
DC 12~24V
L   AC
N   input

+
–

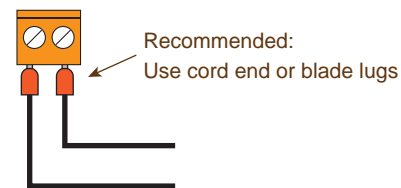485+ 485+ 485- 485-
Terminal Block

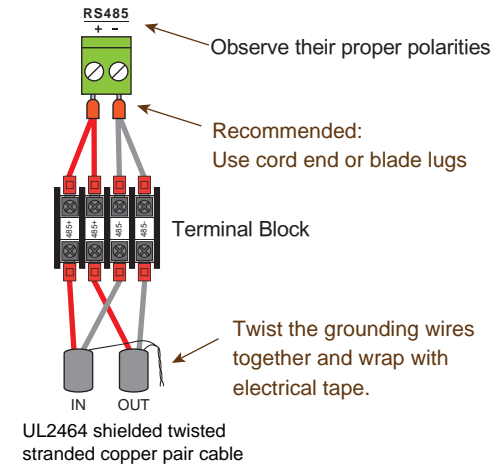IN   OUT
RS485 communication cable

6 Wiring Detail

1. Please follow electrical regulations and recommendations in selecting the wire size and type.
2. Ensure that the wires are making good contact with the terminals and have been screwed securely.
3. Terminals can accept wires with size of no more than 2.0mm^2.

Recommended:
Use cord end or blade lugs

7 RS485 Cable Detail

1. Use UL2464 shielded twisted stranded copper pair, 24 to 22 AWG recommended.
2. Terminate wire ends with cord end or blade lugs.
3. Ensure that the wires are screwed tightly to their corresponding terminals.
4. Ensure that the positive and negative polarities are correct.

RS485 Cable Detail:

RS485
+ –

Observe their proper polarities

Recommended:
Use cord end or blade lugs

485+ 485+ 485- 485-
Terminal Block

Twist the grounding wires together and wrap with electrical tape.

IN   OUT

UL2464 shielded twisted stranded copper pair cable

Smart for Greenlife !

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8 Checklist

◎ Before Powering Up

☐ 1. Check to make sure that the water meter data cable is connected properly according to their color coded positions.

☐ 2. Check to make sure that the power supply is connected properly.

☐ 3. Check that the RS485 cable is connected properly.

◎ After Powering Up

☐ 1. The system status indicator should be blinking every second.

☐ 2. After powering up, the water meter data indicator should be blinking every 5 seconds for 10 times, and then blinking every minute.

9 Address and Baud Rate

1. Address can be set through Modbus communication.

CC130 parameter	
Address	0~254
Baud Rate	1200、2400、4800、9600bps

2. Default address：The last two digits of serial number (00=100)

3. Default baud rate：9600bps

10 Modbus Reference

◎ Register Tables

Register Address	Modscan	Description		Length	Range	Unit	Default	Read/Write
0	03:0001	Totals Reading	Low word	2 words	0-999,999,999	1		R
1	03:0002		High word					
210	03:0211	Device Address - High byte		1 word	0-254	1	Last 2 digits of serial number (00=100)	R/W
211	03:0212	Baud Rate - High byte		1 word	0-3	0 = 9600 1 = 4800 2 = 2400 3 = 1200	0	R/W
215	03:0216	Decimal Places - High byte		1 word	0-5			R

◎ Product Information

1. Command: Address, 3, 250, 0, 0 , 32, CRC (low), CRC (high)

2. Response: Address, 3, 64,···, CRC (low), CRC (high)

ASCII Code (64Bytes)

3. ASCII Code : CC130 2.0 r--A02

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