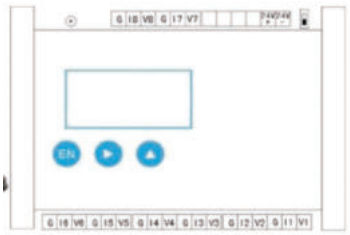
Wireless Current Transmitter

GaMicos

GRT103-T



INTRODUCTION

GRT103-T wireless current transmitter is a wireless measurement and control device developed by our company to support up to 6 4-20mA signal inputs. High precision, low power consumption (standby power consumption less than 0.02mA). Transceiver data through RF radio signals, no need to install wiring, suitable for various applications that convert 4-20mA wired signal and digital input signal into wireless signal.

SPECIFICATION

Input	4~20mA
Accuracy	0.5%F.S
Power	10~28VDC
Wireless transmission	SWSN 433M 470M LORA 433M 470M
Standby power consumption	＜0.03mA
Coordination agreement	SWSN
Transmission distance	SWSN sight distance: 1000 meters (normal barrier environment 80-160 meters) LORA sight distance: 5000 meters (normal barrier environment 500-1000 meters)
Working environment	Temperature -30℃~80℃ Humidity ＜95% without condensation
Input channel	2~6 ways
Size	145*90*40mm (Without antenna)
Installation	DIN35 Track installation
Weight	＜200g

OPERATION METHOD

（1) Connect to the power supply and 4~20mA current according to the label on the meter. “I1” is connected to channel “0” current positive, “G” is connected to channel “0” current negative. "I2" is connected to the channel "1" current is positive, and "G" is connected to the channel "1" current is negative. "I3" is connected to channel "2" with positive current, and "G" is connected to channel "2" with negative current. Connected in turn, this meter can access up to 6 signals.
(2)Turn the power switch from the OFF position to the ON position, and the meter is energized. Note: All wiring must be done without power-on. Current connection must also be disconnected. Live wiring may damage the meter.

INSTRUMENT SETTINGS

（1)Press the “EN” and “▲” keys at the same time, the instrument enters the parameter setting interface. At this time, the set parameter item is displayed at the top of the screen, and the set value is displayed below. Press the “EN” and “▲” keys at the same time, the meter enters the current correction interface. At this time, the set parameter item is displayed at the top of the screen, and the set value is displayed below.

(2)Press the EN key to enter the parameter item to be changed, press the “▲” key to move the cursor to the number to be changed, and then press the “▲” key to change the parameter setting. After setting, you need to press the “EN” key again to save. In this setting, the meter automatically skips to the next parameter after saving the parameter. If you do not need to continue to modify the parameter value, press the “EN” and “▲” keys to exit the parameter setting interface.

(3) After the parameter setting is completed, the instrument needs to be restarted. That is, after turning off the meter and seeing that the display has no digital display at all, turn the meter on again.

(4) Parameter description
P004: Receive host, gateway address
P005: Local address
P006: Channel (band) setting
P010: The data transmission interval is set from 1 to 255 seconds. It is recommended to be no less than 30 seconds.
P014: The transmission power is 0-7. The larger the number, the larger the transmission power.

U002	Correction value for channel 0
U003	Correction value for channel 1
U004	Correction value for channel 2
U005	Correction value for channel 3
U006	Correction value for channel 4
U007	Correction value for channel 5
U009	Correction value for channel 6
U009	Correction value for channel 7

If the display value of channel 0 is 4.1 mA, change the value of U002 to 0.975 to correct the display to 3.9975 (4.1 x 0.975 = 3.9975), etc.

U010	Lower limit of channel 0 range	U018	Lower limit of channel 4 range
U011	Upper limit of channel 0 range	U019	Upper limit of channel 4 range
U012	Lower limit of channel 1 range	U020	Lower limit of channel 5 range
U013	Upper limit of channel 1 range	U021	Upper limit of channel 5 range
U014	Lower limit of channel 2 range	U022	Lower limit of channel 6 range
U015	Upper limit of channel 2 range	U023	Upper limit of channel 6 range
U016	Lower limit of channel 3 range	U024	Lower limit of channel 7 range
U017	Upper limit of channel 3 range	U025	Upper limit of channel 7 range

INSTALLATION AND MAINTENANCE

（1) If the receiving host opens and finds that a wireless sensor has not received data for a long time, you can consider restarting the host, or check whether the wireless sensor is normally turned on, such as whether the power switch has poor contact.
(2) If all the wireless sensor signals are not received properly at the site, please check if the settings are wrong, or if there are different frequency interference in the field, you can try to change the channel, but the signal transmission distance will be shortened after the channel is changed.
(3) Please keep the instrument away from metal objects as much as possible to avoid affecting the signal.
(4) The sensor is forbidden to be placed in the metal shielding case, which will greatly attenuate the transmission of wireless signals. If there are special requirements, please contact the company for product customization.