

Product Overview

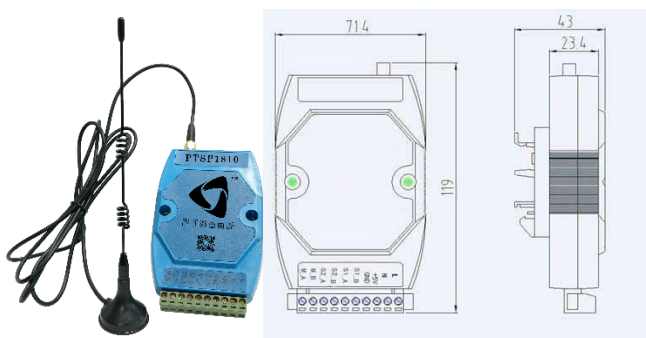
The PTSenR PTSP1810 Multifunction Wireless Repeater Module device is a transparent transmission device which integrates receiving, transmitting wireless data via RS485 forwarding data. It is a data transmission product with high processing speed and stability. With this communication repeater, users can easily realize network monitoring and management. The product uses low power data transmission module, which has the characteristics of high integration, low power consumption, high sensitivity, long distance, high anti-interference ability and so on. The main function is to transform the RS485 signal hubs into relay signals and transmit them to the background industrial computer or BMS or SCADA.

Application

This product is mainly used in various outdoor terminal boxes, high and low voltage switchgear cabinets, ring network cabinets, various box substations, circuit breaker mechanism boxes and other related fields used by the power sector. It is used in network with other wireless temperature measurement products of PTSenR.

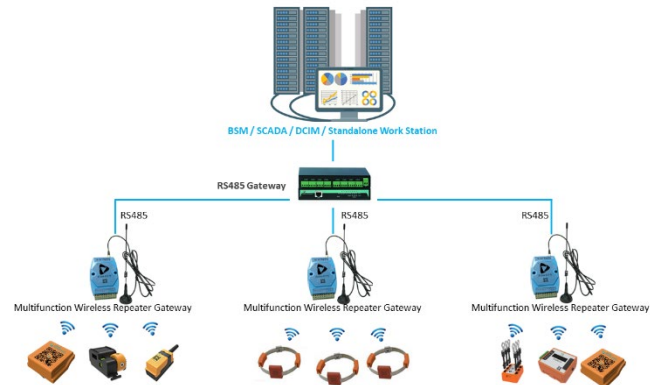
PTSP1810 product has three RS-485 isolated transceivers, which constitute a two-in-one-out serial concentrator. At the same time, it is equipped with RF wireless transceiver modules to receive or transmit air wireless equipped with wireless communication protocol signals of PTSenR. In the operation mode, an output RS-485 interface and two power interfaces. In the receiving mode, the RS-485 level signal S1 and S2 ports transmitted from the lower equipment are sent to the background industrial computer through the M port after the calculation centralization to achieve real-time monitoring. In the transmission mode, RS-485 level signals are transmitted from front-end devices through S1 and S2 ports. After centralized calculation they are sent by antenna ports through Zigbee frequency signals, and then transmitted to the next receiving devices to achieved the purpose of long-distance transmission. It can also be used as a remote signal relay product. When the effective signal passed through the corresponding channel, the corresponding signal lamp will flicker.

Dimensions

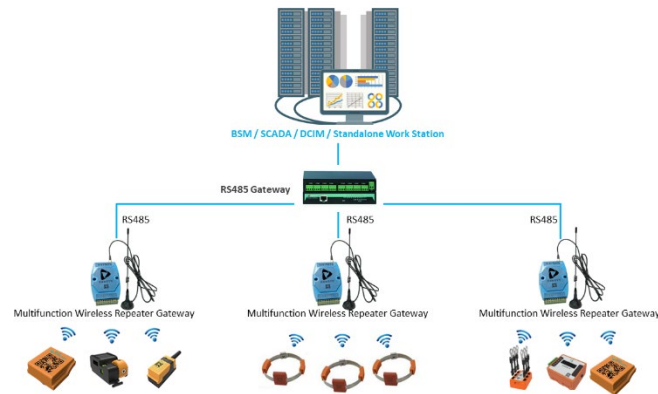


The System Architecture

Local BMS/SCADA/DCIM/STANDALONE WORKSTATION



Multiple repeaters with remote monitoring



Specification

Power Supply Input Voltage	DC 5V±0.2, AC 90~245V
Maximum Power Consumption	≤13mW
Wireless Operating Bandwidth	431 ~ 433MHz (Zigbee)
Transmitting Power	13±1 dBm
Receiving Sensitivity (Maximum)	110±1 dBm @1kbps
Transmission Rate	Up to 4kbps
Wireless Transmission Distance	0.4 ~ 1000meter (Open Area)
Communication Output	3 channel RS485
Installation Class	Class Level 2 pollution
Installation Location	Less exposed location where there is not significant vibration or shock
Communication Rate	2400bps, 4800bps, 9600,19,200bps
Ingress Protection (IP)	IP20
Max number of sensors	>200 pcs

Miscellaneous

Dimensions Size	71.4 x 119 x 43 (mm)
Weight	<0.3 (kgs)
Operation Temperature	-40°C ~ 85°C
Relative Humidity (RH)	≤95%RH (non-condensing)
Storage Temperature	-40°C ~ 85°C
Mounting method	Standard 35mm guide rails
Certification	CE – EN 61000-6-2:2005+AC; 2014/35/EU LOW VOLTAGE DIRECTIVE; 2014/30/EU ELECTROMAGNETIC COMPATIBILITY DIRECTIVE EN 61000-6-4:2007+A1:2011; EN 62368-1:2014+A11:2017

Ordering Information

Part Number	Product Description
PTSP1810	PTSenR Multifunction Wireless Repeater Gateway

