



NB-IoT / RS485 & 5 Ports AUX In / Out

# GATEWAY



W-D20 / W-D2B

## Pioneer NB-IoT Gateway RS485 & 5 Ports AUX In / Out

- NB-IoT Wireless data link provide stable data stream.
- Wide voltage operation for Industrial applications.
- Multi-Interface support RS-485 / Analog or Digital Input / Digital Output.
- AUX Power output for general purpose such as plug-in sensor, or other sub system.
- Resist the water, dust, temperature and shock and meet with the IP68 standard.
- Analog Input Support 0~10 V / 0~20 mA / 4~20 mA / ADC (0~10 V).
- Digital Output support PWM / Latch Mode.
- Redundant battery inside. (W-D2B)





## Case Study: Weather Station Solutions

W-D2X is a RS485 & 5port AUX In/Out NB-IoT gateway that has extended from W-C20 outdoor gateway. Up to 5 Ports analog inputs and digital inputs/outputs support external devices. It connects and trigger analog sensors more simply and More efficiently, which can save the cost of data collection. W-D2X is more suitable for applications of the weather station, crop monitoring and aquaculture. The mini weather station solution is using W-D2X gateway to collect data as rainfall, temperature, wind direction and UV index and upload to the cloud via NB-IoT network. Let the monitoring center get weather data of various region in real time.

	W-D20	W-D2B
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 5 / Digital Output x 5	
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	245 g	295 g
Waterproof	IP 68	
Redundant Battery	X	18650 / 3.7V / 2500mAh
Input Power Supply	12V ~ 36V DC / 1A	
Output Power Supply	Main Port: 10V DC / 100mA (Max.), AUX 2~ AUX 5: 10V DC / 50mA (Max.)	
Power Consumption	12V 15mA @receive / 12V 200mA @transmit / 12V < 1mA @standby	
	X	12V 230mA @charging
Special Specification	Flame Retardant	

\* Specifications are subject to change, in the interest of technical improvement, without notice or obligation.