WUM WIRELESS EXTENSION (PAIR WITH ALL DDTOP INSTRUMENTS)

Summary

WUM Wireless Extension is a wireless communication expansion module for Dandong TOP Electric's radar level meter, magnetostrictive level meter, magnetic float level meter and other level meter products. It integrates a high-precision AD acquisition chip, a low-power MCU processor and a variety of optional wireless communication methods. With simple installation, you can quickly extend level meter from traditional communication into wireless communication. It has the significant advantages of strong versatility, high sensitivity, easy installation, safe and reliable communication.

Operating Principle

WUM Type Internet of Things Wireless Expansion Module collects the output current signal from the supporting instrument through high-precision AD chip (the current signal is proportional to the measured level value), and then converts the analog current signal into digital signal and sends it to MCU processor. MCU processes and judges the data, then sends the current value or fault information of the instrument to data management platform through wireless chip. This enables the data management platform to monitor the current measured level and instrument status in real time.

Main Technical Parameters

- Working Voltage: 24VDC
- Accuracy: ±0.1%
- Communication Methods: LoRa/NB-IOT/4G （Optional）
- IP Rating: IP66
- Ambient Temperature： -40℃~+70℃
- Outline Dimensions: Φ42mm*110mm
- House Material: Stainless Steel 304
- Electrical Interface: M20×1.5 (external thread) or On Request

Technical Parameters Related to Communication Methods

Communication Methods	LoRa	NB-IOT	4G
Operating Frequency Band	470~510mhz	Carrier Frequency Band	Carrier Frequency Band
Network Deployment	LoRaWAN Protocol Independent Networking	Base Station Multiplexing	Base Station Multiplexing
Maximum Transmitting Power	19±1 dBm	23dBm±2.7dB	23dBm±2dB
Reception Sensitivity	-136±1dBm(@SF=12)	<-140dBm	-158dBm
Communication Distance	5km（Urban Road Condition, Non-Wilderness Condition）	Unrestricted (Base Station Coverage	Unrestricted (Base Station Coverage

Model Selection Table

Model	Code		Content		
WUM-			Internet of Things Wireless Expansion Module		
	LW470AD		LoRa （LoRaWAN Protocol）		
	CUNBAD		NB-IOT		
	CU4GAD		4G		
		–			
				A	Vertical Mounting
				B	Horizontal Mounting
WUM-	□	–	□		

Model selection example

WUM-LW470AD-A

WUM Internet of Things Wireless Expansion Module， LoRa (LoRaWAN Protocol), Vertical Mounting.

Outline and Installation

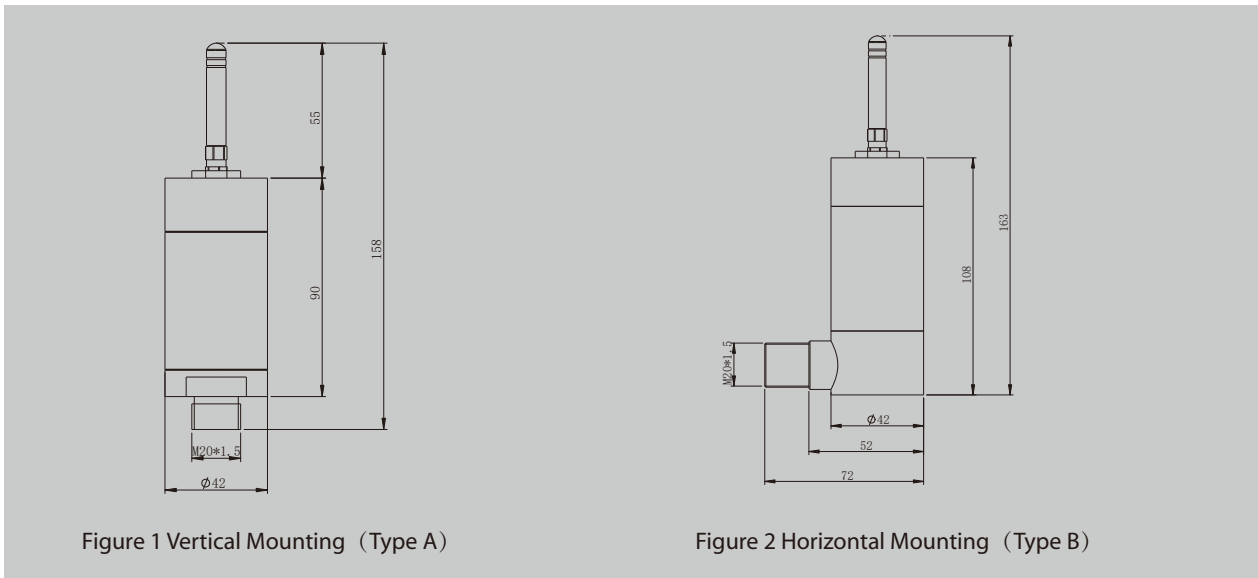**Outline Dimensions for Type A and Type B**

Figure 1 Vertical Mounting （Type A）   Figure 2 Horizontal Mounting （Type B）

Installation

WUM Type Internet of Things Wireless Expansion Module is a matching extension products of level gauge, and has been installed on the matching level gauge in the factory. The module itself will not affect the installation and commissioning of the whole product. Please follow the instruction manual of the matching level gauge for the detailed installation and commissioning. If you need to replace the terminal module, please contact the manufacturer's after-sales personnel.

Ordering Information

▸   Type selection according to model selection table

▸   Model of Level Gauge