

# DW IoT-MODQ

With IP68 enclosures

## FEATURES

- High performance with advanced security features
- Work with various measuring instruments
- High-Speed 16-bit ADC (4-20mA, 0-10V)
- Rich input/output options
- High-speed pulse counting and encoding
- Remote firmware updates (FOTA)
- Stores up to 1,000,000 records or more
- Suitable for outdoor installation in harsh environments
- (LoraWAN) AS923 (10Km on rural area)
- (4G LTE) Compatible with HTTPS, MQTTS and CoAP, Wide Network Coverage, Support LTE



## THE REVOLUTION FOR **SMART SENSOR ENVIRONMENT**

OUR DW IOT-MODQ WITH IP68 ENCLOSURES IS AN EXCELLENT TOOL FOR RECORDING AND MONITORING DATA. WITH CUTTING-EDGE TECHNOLOGY, IT IS DESIGNED FOR FIELD USE, ENSURING DURABILITY. THE INTELLIGENT SOFTWARE CAN CONNECT TO MEASURING INSTRUMENTS FROM VARIOUS BRANDS AND IS CAPABLE OF INTERNET CONNECTIVITY. IT ALLOWS FOR REAL-TIME DATA MONITORING OR DATA ACCUMULATION FOR EFFECTIVE ANALYSIS, MAKING DECISION-MAKING AND PLANNING ALWAYS EASY!



## Design for durability and industrial application

We choose electronic components that withstand temperatures up to 70°C, with protective circuits against various connections, including lightning protection and adverse environmental conditions.

## Multi Sensor Collection

For multi-sensor reading using RS485, Pulse Counter and Analog interface together allows for flexible data collection from various sensors

### RS485 Interface

Allows for robust and long-distance wired communication, commonly used in industrial applications.

### Pulse Counter

Integrated pulse counting functionality for precise monitoring of pulse-based sensors, such as flow meters or energy meters.

### Analog / Digital Input Support

Supports 16-bit 0-10 Volt and 4-20 mA signals for versatile sensor integration

## Data Logging and Storage

Features extensive data logging capabilities with support for various sensor inputs, ensuring accurate and comprehensive data collection.

## Rugged and Durable

IP68 Rated Enclosure: Ensures complete protection against dust and water ingress, making it suitable for harsh environmental conditions and prolonged outdoor use.

## Sample Application

### Water management data logger

Monitors and records water data to help manage and reduce water wastage. Provides real-time data and detailed reports for effective water management

### Environment Sensor Monitoring

Collects and analyzes environmental data such as temperature, humidity, and air quality to ensure optimal conditions. Integrates with various sensors to provide comprehensive environmental monitoring.

## CHARACTERISTICS : (คุณลักษณะ)

<b>CPU</b>	Ultra-low power with High-Performance 32 bit -MCU
<b>Operating System</b>	RTOS (Real Time Operating System)
<b>RTC</b>	Real time clock with buffer and backup battery
<b>Display</b>	(Optional) built-in OLED display Main display : LED
<b>Internal Sensor</b>	Internal temperature measurement
<b>Input/Output</b>	4 Digital inputs  4 analog 0-10 VDC , 4-20mA with configuration alarm thresholds and hysteresis Intelligent data logger (16-bit Resolution) I2C, RS485
<b>Storage</b>	Micro SD Card 16GB  External RAM 2 Mbit  EEPROM 16 Kbit
<b>Software</b>	C/C++ and Python Conditions for verification and data transmission can be set via programmable settings  User friendly communication and configuration software
<b>Environmental</b>	Temperature Range : 0 - 70 °C  Humidity Range : 5% - 95% Rh

## CONNECTIVITY :

<b>Communication (Order the model with 4G or LoRAWAN)</b>	4G LTE / 3G (IoT/M2M-optimized) LTE FDD : B1/B3/B7/B8/B20/B28 WCDMA : B1/B8 GSM/EDGE : B3/B8 or LoRAWAN : AS923
	USB-C port for local configuration Data upload interval configurable Data Upload condition configurable  Remote firmware upgrade
<b>Local Network</b>	1 x RS-485 Interface ( Modbus RTU Master / Slave )
<b>External Connector</b>	IP67 External Connector or IP68 Cable gland
<b>Safety Standard</b>	EN 62311:2008

## POWER SUPPLY :

Additional power input 9-24 VDC  
220 Volt 50Hz adaptor included

## ENCLOSURE : (บรรจุภัณฑ์)

<b>Protection</b>	การป้องกันระดับ IP68, Material : Aluminium , Front Panel : ABS
<b>Mounting</b>	Wall mounting or Din rail



**IP67 External Connector**



**IP68 Cable glands**



**Back Bracket Installation Choice**