IOT400-DL3B1 / IOT400-DL301
LoRa Data Logger

The IOT400 is a cost-effective solution for data acquisition and wireless telemetry. It leverages LoRaWAN technology that is optimized for sending IoT traffic with low data rates over long distances. Thanks to the power saving technology, the IOT400 has ultra-low power consumption which allows it to operate on a single battery for years. Based on open source LoRaWAN standard it has high interoperability between devices and networks.

Applications:
• AMI/AMR: gas, water
• Smart Infrastructure: street lighting, parking, waste management
• Precision agriculture and farming
• Industrial sensors

Battery-powered & easy deploy
• Battery-powered with health alert
• Ext. power supply opt. for heavy loads

Ingress Protection (IP65)
• Harsh environments, wide t° range
• Weatherproof design for moist sites

LoRaWAN technology
• Low power, low data rates
• Long range communication

Data acquisition
• AI/DI/Modbus_RTU for sensors/meters
• Scheduled uplink

LoRa Data Logger for Simple Data Acquisition Application
- DL3B1
- DL301

LoRa Data Logger for Always-on Data Acquisition Application
- DL3B1
- DL301
### Specification Summary

#### Device Interface
- **LoRa Module**: 1* LoRa module
- **I/O Connector**: 2* M16 waterproof connectors with multi-hole cable gland for wiring the required ports to external sensors/meters.

#### Available H/W Ports
- **Analog Input**: 3* AI ports (supports 0-10V / 4-20mA)
- **Digital Input**: 2* DI ports (supports Pulse, Dry Contact)
- **Digital Output**: 1* DO port (Non-Relayed Output)
- **Field Bus**: 1* RS-485 for Modbus RTU/ASCII
- **Console Port**: 1* RS232 for device configuration
- **Wake-up Port**: 1* internal Reed Switch, and reserved wake-up port for device wake-up triggering.
- **Power Source**: 3000~4000mAh 3.6V Li-SOCL2 battery, and reserved option for attaching external SV~12V DC power.
- **Antenna**: 1* LoRa antenna.

#### WAN & Uplink
- **Uplink**: LoRa, support standard LoRaWAN™ protocol and Class A/C.
- **Connection**: By Schedule Plan (per Day/Week/Month)

#### Field Comm.
- **Modbus**: Master for accessing attached Modbus RTU/ASCII Slaves (Upto to 3 Modbus devices supported)
- **Data Logging**: By schedule plan (per Hour/Day/Week/Month)

#### Administration
- **Configuration**: Windows Utility, Console CLI via USB-to-Serial console cable, or Bluetooth wireless
- **System**: Backup & Restore, Reboot & Reset, SysLog, Upgrade

#### Environment
- **OP/Storage Temp.**: -30°C ~ 70°C ; -40°C ~ 85°C
- **Humidity**: 10%~95% (non-condensing)
- **Enclosure**: Plastic (PC, UL-94V2), Bracket Mount
- **Dimension**: 105x 75x55mm (Enclosure only); 132x103x55mm (including Cable Gland, Brackets);

#### Certificate - CE
- **Standards & Regulation**
- **EMI**: EN 55032: 2015 +AC: 2016 Class B
- **EMS**: EN 55024, IEC 61000
- **Radio**: EN 301 489
- **Safety**: EN 60950-1

#### Package Accessory
- **1*Device**
- **1*4000mAh 3.6V Li-SOCL2 Battery (for –DL3B1)**
- **2*Cable Tie for fixing battery (for –DL3B1)**
- **4*Rubber Feet**

#### Optional Accessory (separate order required)
- **USB-to-Serial Console Cable**
- **Bluetooth Module for wireless Configuration**

### SKU Information:

**IOT400-DL3B1-00-yy** : LoRa Node, with Battery
**IOT400-DL301-00-yy** : LoRa Node, without Battery

*‘yy’: Area Variant. As below table*

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**Comment:**
- Specifications are subject to change without prior notice.
- Besides CE, other regional certification needs to be checked for availability.

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