CDS545 Nimbus Modbus Logger Specifications

The Nimbus Modbus logger is a robust, low cost and sophisticated NB-IoT logger with a wide range of input functions. This logger can operate on an external 12V supply or make use of standard alkaline batteries. It is well suited for applications such as those needed in the utilities industry or other remote measurement systems.

The Nimbus Modbus Logger has been designed to allow for easy installation and setup without the need for a complicated infrastructure. Setup and management is carried out using the standard CloudWorks client software.

Features

- Uses NB-IoT technology. NarrowBand-Internet of Things (NB-IoT) is a standards-based low power wide area (LPWA) technology developed to enable a wide range of new IoT devices and services. NB-IoT significantly improves the power consumption of user devices, system capacity and spectrum efficiency, especially in deep coverage.
- Bluetooth interface - setup and manual data collection can be achieved through the Bluetooth interface negating the need for cables that invariably fail during continuous use.
- Battery or external 12V power with battery failover in dual mode.
- Uses 3x standard D Cell alkaline batteries that can last in excess of 5 years under normal usage. Many other loggers use lithium batteries that are expensive and difficult to obtain. Other problems involving lithium batteries are the restrictions when shipping using airfreight. All lithium batteries need to be shipped as hazardous cargo that is becoming increasingly difficult to achieve as many airlines are no longer allowing these batteries on their aircraft.
- Isolated 4-20mA interface. Used for any sensing device with a 4-20mA output.
- Onboard 24V 30mA power generator. The Nimbus Modbus logger can generate a stable 24V output at a maximum of 30mA allowing for the powering of an external piece of equipment or current loop device eliminating the need for a secondary power supply. This option will also function under battery operation.
- RS485 Modbus Port (2-wire).

- Large onboard non-volatile memory - This logger can record up to 20000 records (application specific) for later download.
- Logging intervals from 1 minute to 1 month. Information is internally logged, time and date stamped and transmitted at programmable intervals.
- Remote programming of all setup parameters via GSM link.
- Ideal for leak detection, alarming and water shut-off control to prevent water loss.
- Onboard Bluetooth can stream diagnostic information about signal strength, network status etc.
- Touch sensitive button and LED's for manual wakeup to server and diagnostic purposes are accessable on the outside without the need for opening the housing.

Specifications

- NB-IoT LTE Cat NB1 communications
- Supports B1/B2/B3/B4/B5/B8/B12/B13/B17/B18/B19/B20/B25/B28/B66
- Bluetooth interface
- Powered by battery or external 12V supply
- Option of external power with battery failover and sleep
- All management software supplied free
- Standard Alkaline Batteries - 3 x D cells (5+ years)
- RS485 Modbus Port (2-wire)
- Isolated 4-20mA Input port
- 24V 30mA Generated Power Output
- Up to 20000 record datalog memory (application dependent)
- Logging intervals 1 minute to 1 month
- Rugged housing with seal eye
- Touch sensitive button and LED Diagnostics
- Configuration and diagnostics through Bluetooth interface
- Fully configurable remotely
- Stream data in real-time when powered by external supply
- Size 185mm x 130mm x 55mm (including cable glands)
- Housing Protection Class : IP68 - Max 1.2m, 7 days
- Environment : -20°C to 80°C humidity ≤ 90% non condensing. Check battery specifications for low power systems