CDS551 Cirrus Modbus Logger Specifications

The Cirrus Modbus logger is a robust, low cost and sophisticated LTE/4G GSM 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 Cirrus 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 GPRS/EDGE/LTE/4G technology. 4G has become essential as many cellular network providers around the world will soon no longer be supporting older GPRS/3G technologies, rendering these legacy dataloggers obsolete. This has already started happening in many countries around the world.
- 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 Cirrus 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 or SMS.
- 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.
- Available with the standard internal antenna or a connector (SMA) for an external antenna. Note that the external connector will affect the IP rating.
- Touch sensitive button and LED's for manual wakeup to server and diagnostic purposes are accessible on the outside without the need for opening the housing.

Specifications

- GPRS/EDGE/LTE/4G Modem Technology
- LTE-FDD B1/B3/B5/B7/B8/B20/B28
- LTE-TDD B38/B40/B41
- GSM 850MHz/900MHz/1800MHz/1900MHz
- 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)
- Full SMS driven command set
- 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
    - Standard internal antenna : IP68 - Max 1.2m, 7 days
    - External antenna connector : IP65
- Environment : -20°C to 80°C humidity ≤ 90% non condensing. Check battery specifications for low power systems