CDS541 Cumulus Pulse Logger Specifications

The Cumulus Pulse logger is a robust, low cost and sophisticated 3G logger/controller with a wide range of input/output functions. This logger can operate on a mains 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 control/measurement systems.

Standard in this logger is a GPS receiver allowing for the precise location determination needed in large networks. Communication to the server and database can be achieved via the internet or a private APN.

The Cumulus Pulse 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/3G GSM (UMTS/HSPA) technology.
- Onboard GPS. Networks are plotted automatically on Google Earth giving the client a precise location of assets in the field.
- 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 mains operated with battery failover in dual mode.
- Uses standard off-the-shelf alkaline batteries. This logger 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.
- ECO Interface for the connecting to GWF electronic meters.
- Isolated 4-20mA interface. Used for any sensing device with a 4-20mA output.
- Onboard 24V 30mA power generator. The Cumulus 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.
- 2 x Pulse inputs with echo output - Pulse inputs are used on metering devices that supply a pulse output for a measured amount of product. The echo output will allow this logger to be connected in conjunction with another device requiring use of the same pulse output.
- 1 x Digital input - Used for general input application.
- 1 x Digital output (max 500mA at 50V) - This output can be used to operated a valve, solenoid or similar device.
- Large onboard non-volatile memory - This logger can record in excess of 11000 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.
- Pushbutton and LED's for manual wakeup to server and diagnostic purposes etc.

Specifications

- GPRS/EDGE/3G (UMTS/HSPA) Modem Technology
- UMTS Dual-band: 900/2100MHz
- GSM Dual-band: 900/1800MHz
- Onboard GPS
- Bluetooth interface
- Powered by battery, mains or external 12V supply
- Option of Mains power with battery failover and sleep
- All management software supplied free
- Standard Alkaline Batteries - 3 x D cells (5+ years)
- ECO Interface
- 24V 30mA Generated Power Output
- 2 x Pulse inputs with echo out
- 1 x Digital input
- 1 x Digital output (max 500mA at 50V)
- Isolated 4-20mA Input port
- Up to 11200 record datalog memory (application dependent)
- Full SMS driven command set
- Logging intervals 1 minute to 1 month
- Rugged housing with padlock eye
- Pushbutton and LED Diagnostics
- Configuration and diagnostics through Bluetooth interface

- Fully configurable remotely
- Stream data in real-time when powered by mains or 12V supply
- Size 175mm x 180mm x 78mm (including cable glands)
- Housing Protection Class : IP65
- Environment : -20°C to 80°C humidity ≤ 90% non condensing. Check battery specifications for low power systems