

CDS538 CUMULUS Logger Specifications



The Cumulus logger is a robust, sophisticated 3G GSM logger/controller with a wide range of input/output capabilities, making it ideal for a large number of uses including Utility and Remote control/measurement applications. Standard in this Logger is a GPS receiver allowing for the precise location determination needed in larger networks.

Communication to your own computer and database can be achieved by

using the CloudWorks server (software for your own server supplied free) on the internet

or a private APN. The Cumulus Logger has been designed to allow for easy installation and setup without the need for a complicated server infrastructure. Setup and Management software (CloudWorks) is supplied free of charge to allow clients to manage their own networks and data. There are no monthly charges for collecting and hosting data as the client



can provide this service themselves with a standard desktop computer.

The Cumulus Logger can operate in one of three power configurations.

- Mains powered in this mode the logger can be continuously connected to the server allowing for the streaming of live data.
- Battery powered The Cumulus Logger uses standard 'D' Cell Alkaline batteries that will last in excess of 5 years. In this mode, the logger will 'wakeup' (normally 6 hourly) and upload its recorded data to a remote database.
- External 12V supply same as a Mains operated logger. In this mode, a battery pack can be fitted and the logger will automatically switch to battery mode should the power fail.



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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 invariable fail during continuous use.
- Battery or Mains operated with battery failover in dual mode.
- Standard off-the-shelf Alkaline batteries. This logger uses 3x standard D Cell alkaline batteries that 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.
- <u>Isolated</u> Modbus/RS485 interface. The isolated Modbus/RS485 interface can be used on a large number applications or sensing equipment. This port is also well protected against large voltage transients.
- 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 11200 records for later download. Application specific.
- 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 GPRS 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.

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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)
- Isolated Modbus/RS485 Port
- 24V 30mA Generated Power Output
- 2 x Pulse inputs with echo out. Minimum pulse width of 33 milliseconds.
- 1 x Digital input
- 1 x 500mA max 50V Output
- 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

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