

Nano NRL Data Logger 3001M C/L/I/H



The 3001M Nano Neon Remote Logger is the smallest member of our NRL family that was designed to connect to a single sensor. It can be configured to use either Cellular, LoRa, Iridium or Microsatellite networks as its method of sending sensor data from the field to the Neon Server.

The 3001M Nano NRL connects to sensors in the field, collects readings from those sensors, logs the sensor data, provides control functions and also transmits the collected data to a central server via a Cellular, LoRa or Satellite network.

The 3001M Nano NRL is programmed in the field with a Unidata standard program called a scheme. The scheme specifies how often and for how long the datalogger should collect data from the sensors and how often the data should be sent to the server. Control outputs are also set up in the scheme by setting up custom events.

A wide range of sensor types are supported, for example, analog sensors, frequency counters, digital inputs as well as Modbus and SDI-12.

The 3001M NRL comes with 2 x D size Lithium batteries. Furthermore, the optional 3901A Lithium Battery Pack can be connected to 3001M, that extends the battery capacity by 26Ahr. Multiple additional battery packs can be daisy chained together to further extend the battery capacity.

Sensors are connected to the logger via M12 IP68 connector, SQL connector or a custom specified connector, allowing for easy removal of the logger if servicing is required.

Contact us to discuss special mounting arrangement for 3001M NRL.

SPECIFICATIONS

PHYSICAL SPECIFICATIONS

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|------------------------|---|
| MATERIAL: | Polycarbonate |
| SIZE: | L115mm x L90mm x L80mm |
| WEIGHT: | 300g |
| OPERATING TEMPERATURE: | -20° to +60°C. Not affected by humidity |
| ANTENNAE: | External Low Profile Antenna |

ELECTRICAL SPECIFICATIONS

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|-------------------|---|
| EXTERNAL POWER: | 9 to 30V DC |
| CURRENT DRAW: | 50µA Standby |
| INTERNAL POWER: | 3.6 Volt Lithium D Cell x2 |
| INSTRUMENT POWER: | 15V or 18V regulated, 80mA (user selectable) |
| ANALOG CHANNELS: | 1 Single ended (0-2.5V DC) with 12 bit resolution |

| | |
|------------------------|---|
| MODBUS: | 1 x Modbus RS485 RTU protocol, 57600 baud max |
| SDI-12: | 1 x SDI V1.3 Compliant, instrument mode |
| COUNTERS: 1 | 16 bit, DC to 300Hz potential free contacts or 0 to 5V DC digital input (C0) |
| CONFIGURATION PORT: | USB B Micro Port and SD Micro Card |
| OPERATING FREQUENCIES: | Option C: 2G/3G/4G/LTE Option L: LoRa AU915, US915, EU868, AS923 Option I: 1.5 GHz Option H: 500 MHz |
| SCAN RATE: | Programmable from 1 second to 5 minutes |
| LOG RATE: | Programmable from 1 second to 24 hours |
| BAROMETER: | 260-1260hPa Absolute Digital Output Barometer |