3001 BOREHOLE NEON REMOTE LOGGER



neø



The 3001 Borehole Neon Remote Logger can be specifically designed to fit in to very narrow groundwater monitoring bore headworks or mounted onto the bore itself. It can be configured to use either Cellular, Cat M1 and NBIoT or Iridium SBD networks as its method of sending sensor data from the field to the Neon Server.

The 3001 Neon Remote Logger 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 or Satellite networks.

The 3001 Neon Remote Logger 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 3001 NRL comes with 2 x D size Lithium batteries. Furthermore, the optional 3901A Lithium Battery Pack can be connected to 3001, 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.

MATERIAL	Polycarbonate	CONFIGURATION	USB B Micro Port and SD Micro Card
SIZE	L115mm x L85mm x L71mm, 300g	ANALOG CHANNELS	1 Single ended (0-2.5V DC) with 12 bit resolution
OPERATING TEMPERATURE	-20°C to 60°C. Not affected by humidity	COUNTER CHANNELS	16 bit, DC to 300Hz potential free contacts or 0 to 5V DC digital input (C0)
ANTENNA	Model dependant	INSTRUMENT POWER	5.5V (100mA) to 18V (60mA) regulated, User Programmable
SCAN RATE	Programmable from 1 second to 5 minutes		
LOG RATE	Programmable from 1 second to 24 hours	SDI-12	Single Channel, SDI V1.3 Compliant instrument and recorder modes supported
TIME CLOCK	Battery Backed Real Time Clock, Accuracy ±10 sec/month (non-Neon version), locked to server time clock (Neon)		
		MODBUS	Single Channel, RS485 RTU or ASCII protocol, 57600 baud (max) Functions 01, 02, 03, 04, 05/15, 06/16
СРИ	16 Bit, 20MHz, Ultra Low Power		
STORAGE MEMORY	7.5Mbytes Flash (non-volatile), 3.75 Million log data points	ACCELEROMETER	Yes, Senses changes in logger orientation
EXTERNAL POWER	9 to 30V DC	BAROMETER	Optional-260-1260hPa Absolute, resolution: 0.1 hPa
EXTERNAL BATTERY	Optional: 3901 2 x Li D Cell Battery Pack		
INTERNAL BATTERY	Two 3.6 Volt Lithium D Cell	BLUETOOTH	Optional - Yes
CURRENT DRAW	< 85µA Standby, Max 500mA Active	MODEM OPTIONS	- Cellular 3G/4G/LTE - NBIoT - Satellite Iridium SBD
RTC BACKUP BATTERY	3.6V Li Coin Cell (5 year life)		

SPECIFICATIONS

AVAILABLE FROM: Unidata Pty Ltd | 40 Ladner Street, O'Connor, 6163 Western Australia | Tel: +61 8 9331 8600 | info@unidata.com.au | www.unidata.com.au