

Neon Remote Satellite Terminal 2015D

- Internet enabled
- Coverage in most countries
- Built-in logger
- Expandable via the Starlogger
- Modbus RS485 Interface
- SDI-12 interface for connection low power instruments
- On-board digital and analogue connection to sensors
- Built in logger with optional volatile flash memory archive

The 2015D NRT Satellite is a small self-contained unit which connects to sensors in the field, collects readings from those sensors, and transmits the collected data to a central server via satellite communications.

The Neon central server system is provided on a Neon Data Service basis and on a Neon Client System basis and provides a central computer system to monitor and receive data from many NRT units in the field.

The 2015D NRT Satellite is designed to automate collection of remote data from environmental monitoring, industrial measurements, and utility metering via the international Globalstar LEO Satellite network from any location on the globe, except the Arctic, Antarctica, and Africa.

Fully bi-directional communications are possible via the Neon server. Data can be collected directly and the NRT can be programmed from any internet connection.

The 2015D NRT Satellite supports integrated logging or automated collection of data from an external datalogger.

The 2015D NRT Satellite's built-in modem supports packet data. Long battery life and low operating costs are made possible through use of advanced microcontroller technology and an efficient protocol that takes advantage of Globalstar's packet transfer capability.

The 2015D NRT Satellite supports integrated logging or automated collection of data from an external datalogger.

Inputs include analog, digital and SDI 12 datalogger interface standard. There is also Modbus support, a partial implementation of the Modbus protocol which allows for extract data (get) and place data (put) from/to a specific register within the Modbus RTU on an RS485 connection.

(Further details on request)



Physical specifications

Material:	Anodised aluminium
Size:	200 mm x 112 mm x 50 mm (HxWxD)
Weight:	850 grams (including battery pack)
Operating temperature:	-20°C to 60°C. Not affected by humidity
Antenna:	External conical dielectric resonator 103 mm x 63 mm (DxH), (optional 1 metre cable)

Electrical specifications

Battery:	10.8V 13Ah lithium (non-rechargeable)
Battery life:	5 years (based on daily schedule)
External power:	10.5 to 24V DC input available if required
Instrument power:	5V unregulated supply (5mA max) plus 2.5V ref (5mA max)
I/O:	4 x analog inputs – 12 bit resolution 1 x counter input – 16 bit/3kHz, 3–5V DC signal (included) 3 x counter inputs – 16 bit/300Hz, 3–5V DC signal (option) 1 x open collector output, 250mA maximum 1 x HSIO (16 x 16 bit bi-directional, synchronous data) channel
SDI-12:	SDI-12 v1.3 recorder (1200 baud smart instrument Channel)
Modbus:	RS485 RTU Protocol, 19200 baud max, Functions 01, 02, 03, 04, 05/15, 06/16

Integrated logger specifications

Storage memory:	30kB/15,000 readings – non-volatile flash memory
Optional storage memory:	8MB/4,000,000 readings – non-volatile flash memory
Time clock:	Crystal regulated, +/- 10 seconds/month – automatically network synchronised
Scan rates:	Programmable from 1 second to 5 minutes



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