

# 2011C Neon Remote Module – Terrestrial

- Internet enabled
- Integrated status display and operating buttons
- Compact case with simplified external wiring
- Up to 5 years battery life depending on reporting schedule
- Built-in logger with 8mb on-board non-volatile flash memory archive
- Almost unlimited data storage
- Expandable via the Starlogger interface
- SDI-12 interface for connection to a wide range of low-power instruments
- On-board digital and analogue interfaces for direct connection to sensors/ instruments



The NRM Terrestrial is a small self-contained unit in a compact case which connects to sensors in the field, collects readings from those sensors, and transmits the collected data to a central server via a cellular telephone network.

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 Neon NRM units in the field.

The NRM Terrestrial also incorporates an LCD status display and operating buttons.

It is designed to automate collection of remote data from environmental monitoring, industrial measurements, and utility metering via GSM/GPRS/CDMA/WCDMA and NextG cellular networks from any location within the cellular network coverage area.

Fully bi-directional communications are possible via the Neon server. Data can

be collected directly and the NRM-Terrestrial can be programmed from any internet connection.

The NRM Terrestrial supports integrated logging or automated collection of data from an external data logger.

NRM Terrestrial's built-in modem supports packet data, switchboard circuit data, and SMS communications. It has long battery life and low operating costs through use of advanced microcontroller technology.

## Physical specifications

Material:	Polycarbonate
Size:	85 mm x 165 mm x 56 mm (HxWxD)
Weight:	350 grams (including battery pack)
Operating temperature:	-20 °C to 60 °C. Not affected by humidity
Antennae:	Internal stub, optional external whip antenna

## Electrical specifications

Battery:	3.6V 13Ah lithium (non-rechargeable)
Battery life:	5 years (based on daily schedule).
External power:	6V to 16V 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 8 bit/300Hz, 3–5V DC signal (option) 1 x open collector output 1 x HSIO (16 x 16 bit bi-directional, synchronous data) channel
Serial Comms:	RS232C (300 to 38 400 baud)
SDI-12:	SDI-12V1.3 recorder (1200 baud smart instrument channel)

## Integrated logger specifications

Storage memory:	15 000 readings – non-volatile flash memory
Time clock:	Crystal regulated, +/- 10 seconds/month – automatically network synchronised
Scan rates:	Programmable from 1 second to 5 minutes
Log intervals:	Programmable from 1 second to 24 hours



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