

## 195-NL32 Data Logger

The **195-NL32 NovaLogger** is a rugged instrument designed to operate in the extremes of cold and hot weather experienced worldwide. As the key component of a meteorological system, it collects and stores data from many types of sensors. Stored data is uploaded to a USB flash drive or accessed through the RS232 serial port or Ethernet port. Real-time data is also available through these ports.

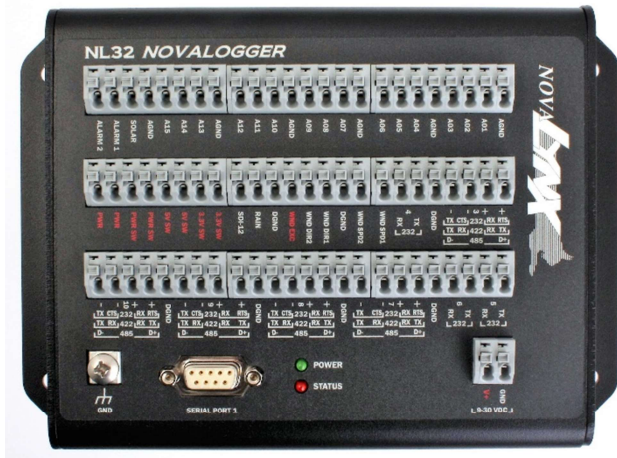
The NovaLogger is compatible with voltage and current output sensors, thermistors, and some serial output type sensors. Plug & Measure™ technology is available for selected sensors, making setup easier. Other sensor types are programmed through a menu selection and parameter entry process.

### Features

- 32 bit processor
- 8 MB internal memory
- 6 GB capacity USB port
- RS232, RS422, RS485, USB and Ethernet ports
- 15 analog channels
- 2 dedicated wind speed/direction channels
- 1 rain accumulator channel, 2 alarm outputs

### Applications

- Agriculture
- Meteorology
- Solar Energy



195-NL32



195-NL32N with Accessories

### Ordering Information

- |               |  |
|---------------|--|
| 195-NL32      | Data Logger in Stand-Alone Enclosure with 6' serial cable, 6' USB cable, 100-240 Vac adapter with 3' cable   |
| 195-NL32N     | Data Logger in NEMA-4X Fiberglass Enclosure with 6' serial cable, 6' USB cable, 100-240 Vac battery charger with 22" cable, 12 Vdc/7Ah battery, and mast mounting hardware |
| 195-NL32STR   | Graphical Display Software   |
| 195-NL32STR-H | HTML Option  |
| 320-600-C     | Solar Panel Battery Charger, 10W with regulator and mounting hardware  |
| 395-E         | Sunshield Assembly for NEMA Enclosure  |

**Environmental**

Operating temperature range	-40 to +85°C
Storage temperature range	-60 to +85°C
Humidity	0 to 90% RH
Vibration	10-500 Hz to 2 G

**Power**

Voltage range	9-35 VDC (40 VDC absolute maximum) <i>reverse polarity protected</i>
Peak current	80 mA at 12 VDC (all ports active) <i>protected by 2A fuse</i>
Nominal current	45 mA at 12 VDC
Sleep mode current	75 uA at 12 VDC
Battery life	> 10 years for memory and clock

**Analog Inputs**

Voltage input channels	16 at 14-bit resolution (one channel dedicated to battery monitor)
Voltage input ranges	25mV, 50mV, 100mV, 250mV, 500mV, 1V, 2.5V, and 5V
Current input channels	1 at 14-bits resolution
Current input ranges	0.25uA, 10 uA, 40 uA, 100 uA, 1 mA
Temperature input channels	15 at 14-bit resolution
Temperature input range	-50 °C to +60°C with 10K ohm J-type thermistor
Wind speed (AC or DC pulsed)	2 channels at 1400 Hz each
Wind direction	2 channels at 10 bits resolution

**Digital Inputs/Outputs**

Rain input	Pulse counter rain gauge input, 12 Hz max
Alarm outputs	2 open collector high/low threshold outputs. (20Vdc, 2A max)

**Communications Ports**

RS-232/422/485 ports	4 fixed RS-232 ports, 6 software configurable multi-protocol ports
Bit rates	Up to 1Mbps RS-232, 10 Mbps RS-485/422
Modem port	One RS-232 with RTS/CTS, switched modem power
USB port	One B-type USB port
Memory port	One A-type USB port, 6GB capacity
SDI-12 port	One standard compliant port (not supported in current firmware)
Ethernet port	10/100 Base TX
WiFi port	IEEE 802.11 b/g (not supported)

**Features**

Calendar clock	Date, time, leap year, 2 time-of-day alarms
On-board data memory	8 MB non-volatile flash
Dimensions (195-NL32)	7-13/16" x 5-5/16" x 2" ( 198 x 135 x 51 mm )
Dimensions (195-NL32N)	15" x 11-1/4" x 5-3/4" ( 381 x 286 x 146 mm )
Weight / Shipping (195-NL32)	2.5 lbs / 5 lbs ( 1.13 kg / 2.27 kg )
Weight / Shipping (195-NL32N)	16 lbs / 20 lbs ( 7.26 kg / 9.07 kg )