



Powerful Network Link

Extremely low power consumption

Overview

Campbell Scientific's NL200 is a powerful network link interface that provides a wired Ethernet network connection to dataloggers and peripherals. It allows our dataloggers, as well as other serial devices, to communicate over a local area network or a dedicated Internet connection.

Additionally, the NL200 supports sophisticated networking capabilities, especially when used in PakBus networks with PakBus^(R) devices. For example, with the NL200, multiple PakBus clients can be connected to a single datalogger at the same time.

Benefits and Features

- › Extremely low power consumption (50 mA)
- › Ethernet to CS I/O bridging that provides direct access to the internal TCP/IP stack in the CR800, CR850, CR1000 and CR3000 dataloggers
- › Serial server functionality for networking Campbell Scientific devices as well as third-party devices
- › PakBus routing

Technical Details

The NL200 communicates with Campbell Scientific dataloggers and peripherals using an Ethernet 10/100 Mbps communications link. It has CS I/O and RS-232 ports for communication and a USB port for NL200 configuration.

The NL200 can be configured to bridge Ethernet and CS I/O communications allowing access to the internal IP functionality of the CR800, CR850, CR1000, and CR3000 (e.g., web page access, email, FTP). This device also can be configured to act as a serial server, as a PakBus router, or as a TLS Proxy server.



Ordering Information

Network Link Interface

NL200 - Network Link Interface - shipped with an SC12 cable for connecting to the datalogger's CS I/O port, and hardware for mounting to an enclosure backplate.

Power Peripherals

One of the following is required to power the NL200:

004202/004248 - AC/DC adapter allows ac power to serve as the power source for the NL200. It is often used when the NL200 is in an office next to a computer.

006725 - Field power cable allows the NL200 to be powered from a suitable 12 Vdc battery, e.g. a datalogger supply.

Serial and Ethernet Cables

008085 - DB9 Female to DB9 Male Cable (1.8 m) - connects the NL200 to the datalogger's RS-232 port.

Surge Protector

009003 - Ethernet Surge Protector helps protect device from electrical surges. A straight-through Ethernet cable is required to connect the 009003 to the NL200. Another Ethernet cable is used to connect the 009003 to the computer or hub.

Specifications

- › RoHS Compliant
- › Magnetic isolation, ESD, and surge tested
- › Power Connector: DC Barrel
- › Power Requirements: 7 to 20 Vdc (not powered via CS I/O or USB)
- › Configuration: Device Configuration Utility over USB or Ethernet; Telnet console over Ethernet
- › CS I/O Port: SDC 7, 8, 10, or 11 (does not support ME)
- › RS-232 Port: DTE
- › USB Port: Micro-B
- › Ethernet Port: IEEE 802.3, Auto-MDIX, IPv4, TCP, DHCP, Ping, Telnet, TLS, PakBus
- › Dimensions: 16 x 6.73 x 2.54 cm (6.3 x 2.65 x 1 in.)
- › Weight: 177 g (6.3 oz)

Temperature Range

- › Standard: -25° to +50°C
- › Extended: -55° to +85°C

Communication Rate

- › RS-232 Port: 1200 to 115.2k bps
- › CS I/O Port: 9600 to 460.8k bps
- › Ethernet: 10/100 Mbps

Current Drain

- › 50 mA active @ 13 Vdc
- › 2 mA forced standby available when using Ethernet-to-CS I/O Bridge Mode

CE Compliance

- › Meets requirements for a class B device under European Standards
- › Application of Council Directive(s): 2004/108/EC
- › Standards to which Conformity is Declared: EN61326-1;2006

