CAMPBELL SCIENTIFIC
WHEN MEASUREMENTS MATTER

NL200

Network Link Interface

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 devices.

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

Temperature Range Options (choose one)

-ST Tested -25° to +50°C

-XT Tested -55° to +85°C

Serial and Ethernet Cables

10873 DB9 Female to DB9 Male Cable (6 feet)—connects the NL200 to the datalogger's RS-232 port

28900 10baseT Ethernet straight through cable (10 ft).

Surge Protector

28033 Ethernet Surge Protector helps protect device from electrical surges. A straight-through Ethernet cable is required to connect the 28033 to the NL200. Another Ethernet cable is used to connect the 28033 to the computer or hub.

Power Peripherals

One of the following is required to power the NL200.

15966 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.

14291 Field power cable allows the NL200 to be powered from a suitable 12 Vdc battery.

14020 Field power cable CS I/O to 12 Vdc Barrel Plug that allows the datalogger's power supply to be used.

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