CAMPBELL SCIENTIFIC®
WHEN MEASUREMENTS MATTER

NL240
Wi-Fi Communications Peripheral

Powerful Wi-Fi Network Link

Extremely low power consumption

Overview

Campbell Scientific's NL240 is a powerful Wi-Fi network link interface that provides a wireless network connection to dataloggers and peripherals. It supports sophisticated networking capabilities, especially when used in PakBus networks with PakBus devices. For example, with the NL240, multiple PakBus clients can be connected to a single datalogger at the same time.

Benefits and Features

> Low power consumption
> Wi-Fi to CS I/O bridging provides direct access to internet protocol capabilities of CR800, CR850, CR1000, or CR3000 loggers
> Powerful PakBus routing capabilities

> Serial server functionality for networking Campbell Scientific devices as well as third-party devices
> Provides IP connectivity for communication with LoggerLink smartphone app and LoggerNet PC software

Specifications

> CE Compliant
> Material: Aluminium case with black anodized finish
> Dimensions: 16 x 6.73 x 2.54 cm (6.3 x 2.65 x 1 in)
> Weight: 177 g (6.3 oz)
> Configuration: Device Configuration Utility over USB or Wi-Fi
  Terminal menu over Telnet
  Terminal menu over RS-232
> CS I/O Port: SDC 7, 8, 10 or 11 (does not support ME)
> RS-232 Port: DTE, DB9 Male
> USB Port: Micro-B

Operating Temperature Range
> Standard: -25° to +50°C
> Extended: -55º to +85ºC

Communication Rate
> RS-232 Port: 1200 to 115.2 bps
> CS I/O Port: 9600 to 460.8k bps

WLAN

> Antenna Connector: RPSMA

> Supported Technologies: 802.11b/g/n, WPA, WPA2 (Personal)/TKIP or AES, WEP, WEP(open), APIPA/AutoIP, IPv4, IPv6, ICMP/Ping, ICMPv6/Ping, TCP, DHCP Client, SLAAC, DNS Client, HTTPS Proxy, Telnet Server, TLS, PakBus, Modbus, TCP/IP

> Topologies: infrastructure and ad-hoc

> Transmit Power: 7 to 17 dBm (5 to 50 mW)

> Rx Sensitivity: -97 dBm (< 8% PER)

> Frequency: 2.4 to 2.5 GHz (2.4 GHz ISM band)

Power

> Power Connector
> CS I/O Port or
> DC barrel connector (not powered over USB)

> Supply Voltage: 7 to 20 Vdc

Power Consumption

> Maximum: 950 mW

> Typical, Always On: 600 mW idle, 670 mW communicating, 65 mW searching for out of range network

> Typical, Low Power Mode Enabled: 73 mW idle, 480 mW communicating, 50 mW searching for out of range network

> Sleep: 16 mW

Ordering Information

Network Link Interface

NL240	Wi-Fi Communications Peripheral - 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 NL240 if the device is not connected to the datalogger's CS I/O port.

004248	AC/DC adapter that can power the NL240 independently from an AC power outlet.
006725	Field power cable allows the NL240 to be powered from a 12 Vdc source.

Antennas and Antenna Cables

An antenna is required to use the NL240

009961	Unity gain (0 dBd), 1/2 wave whip, omni-directional antenna, which features an articulating knuckle joint that can be oriented vertically or at right angles.
009962	Waterproof enclosure mount antenna.

Serial Cable

#10873	DB9 Female to DB9 Male Cable (1.82 m) - connects the NL240 to the datalogger's RS-232 port.