



## Ethernet Connectivity and Expanded Data Storage

### Overview

Ethernet connectivity and expanded data storage capacity are easily added to a CR1000 or CR3000 by attaching an NL116. The Ethernet connection provides access to the powerful Internet capabilities of the data logger for data collection and

control. Additionally, gigabytes of data and file storage capacity can be added to the data logger using a removable CompactFlash card.

### Benefits and Features

- › Provides a native Ethernet connection, allowing the data logger to communicate directly using a variety of Internet protocols
- › CompactFlash cards can be used to greatly expand data storage capacity
- › The ability to remove and swap cards makes retrieving data and files fast and simple
- › Integrated protection for surge and ESD
- › Data-logger-controlled power management for low-power operation

### Detailed Description

#### Data Storage on CompactFlash Cards

One Type I or Type II (CF) card fits into the NL116's card slot. Campbell Scientific offers and recommends the CFMC256M, CFMC2G, and CFMC16G CF cards (see [Ordering Information](#)). Only industrial-grade CF cards should be used with our products. Although consumer-grade cards cost less than industrial-grade cards, the consumer-grade cards are more susceptible to failure, resulting in both the loss of the card and

its stored data. Industrial-grade cards also function over wider temperature ranges and have longer life spans than consumer-grade cards.

The NL116/CF card combination can be used to expand the data logger's memory, transport data/programs from the field site(s) to the office, and upload power up functions. The computer can read the CF card with the computer's USB port and the 17752 Reader/Writer.

## Specifications

Transmission Distance or Area	Worldwide
Storage Capacity	256 MB, 2 GB, or 16 GB
Data Logger Interface	40-pin peripheral port on CR1000 or CR3000
Ethernet	10/100 Mbps, auto-detect 10BaseT/100Base-TX, full/half duplex, IEEE 802.3, auto MDI/MDI-X
CompactFlash Cards	Campbell Scientific recommends industrial-rated cards.
Power Source	12 V from data logger 40-pin peripheral port
Power Consumption	58 mA typical, 3 mA Ethernet off
Temperature Range	» -40° to +70°C (standard)

	» -40° to +85°C (extended)
Service Requirements	Ethernet access
Dimensions	10.2 x 8.9 x 6.4 cm (4.0 x 3.5 x 2.5 in.)
Weight	154 g (5.4 oz)
<b>Compliance</b>	
Application of Council Directive(s)	2004/108/EC Electromagnetic Compatibility Directive (EMC)
Product Standard	EN 61326-1:2013 – Electrical Equipment for measurement, control and laboratory use (EMC requirements – for use in industrial locations)
2011/65/EU	The Restriction of Hazardous Substances Directive (RoHS2)

For comprehensive details, visit: [www.campbellsci.com/nl116](http://www.campbellsci.com/nl116) 



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