# RS232/422/485 Data over Ethernet Terminal Server

#### CNFE2DOE2

#### **APPEARANCE**

comne

**Communication Networks** 





#### DESCRIPTION

The ComNet™ CNFE2DOE2 allows any combination of two RS-232, RS-422, or 2 or 4-wire RS-485 serial data circuits to be inserted onto any 10/100 Mbps Ethernet-based network. Basic flow control/handshaking (Request-to-Send & Clear-to-Send) is included, when this device is used with RS232-compatible equipment requiring this functionality. The CNFE2DOE2 includes two serial data input/output ports, and two Ethernet ports; one accepting an SFP (Small Form Factor Pluggable), and the other an RJ-45. The two serial ports may be configured by the user for communicating from one port to the other through either the user's network, or via a PC. It may be used as a protocol converter (serial data to Ethernet) or as a media converter, for converting copper transmission media to fiber. Serial data appearing on either of the two serial data ports is converted to Ethernet, and transmitted to both the SFP and RJ-45 ports, permitting the unit to be simultaneously used as a media converter and a terminal server. A remote user and a local user can access at the same time local serial data devices connected to the serial data ports. Configuration of this device is performed through its internal web server. By selecting the appropriate ComNet SFP, a copper or optical interface may be used to achieve the desired optical transmission distance, using one fiber with WDM, or two separate multimode or single mode fibers. These models require the ordering of sold-separately interchangeable SFP modules for fiber type, distance and connectors. A software utility feature allows the user to locate other CNFE2DOE2 terminal server devices installed within the same subnet, and to create virtual communications ports for each serial port on the device. Com0com shareware is also included, allowing the user to create a "virtual" serial port on their PC, and then connect the PC to a TCP/IP connection using the com2tcp utility. The use of these two utilities enables communications through an Ethernet network to the CNFE2DOE2, and provides control of the remote hardware, as if it were connected directly to the PC COM port. Packaged in the ComNet "middle-sized" housing, the CNFE2DOE2 is ideal for those installations where space may be limited, and it may be DIN-rail mounted by the addition of the DINBKT1 Adaptor Plate.

#### APPLICATIONS

- › Access Control Systems
- > Building Automation and Environmental Control Systems
- › Computer/Data Equipment
- > Fire and Alarm Systems
- > Traffic Signal Control Equipment

#### **FEATURES**

- > Environmentally Hardened -40° to +75°C
- > Two RS232/422/485 selectable serial ports
- > NTCIP compatible
- > Easy configuration through web interface (HTTP)
- Port control and management supported by open source com0com and com2TCP
- > Tested and certified by an independent laboratory for full compliance with the environmental requirements (ambient operating temperature, mechanical shock, vibration, humidity with condensation, high-line/low-line voltage conditions and transient voltage protection) of NEMA TS-1/TS-2 and the Caltrans Specification for Traffic Signal Control Equipment.
- Voltage transient protection on all power and signal input/output lines provides unconditional protection from power surges and other voltage transient events.
- › Power and Port status LED indicators
- > Automatic resettable solid-state current limiters
- > Lifetime Warranty

## RS232/422/485 Data over Ethernet Terminal Server

## SPECIFICATIONS

Data		LED Indicators:	- Power - Ethernet - Serial Data
Data Interface:	UART, RS232/RS422/RS485, RS232 Hardware		
Data Rate:	Handshaking, RS485 2-wire/4-wire 2400, 9600, 19200, 38400, 57600, 115200 Kbps	Electrical & Mechanical Power: Current Protection:	9-24 VDC @ 350 mA max Automatic Resettable
Ethernet	10/100TX, 100FX	Circuit Board:	Solid-State Current Limiters Meets IPC Standard
Management	HTTP, Auto-Discovery Tool	Size (in./cm) (L×W×H) Shipping Weight:	4.08 × 3.74 × 1.1 in., (10.36 × 9.5 × 2.8 cm) <1 lb./0.45 kg
Network Protocols	TCP/IP, UDP, HTTP, DHCP, ARP, UPNP,	Shipping Weight.	<11b./0.45 kg
Supported	Telnet RFC2217	Environmental MTBF:	>100,000 hours
Operating Systems Supported	Windows® XP®, Windows® Server® 2003, Windows® Server® 2008, Windows® Vista®, Windows® 7	Operating Temp: Storage Temp: Relative Humidity:	-40° C to +75° C -40° C to +85° C 0% to 95% (non-condensing)†
Cable	Cat5(e)6		
Fiber Connectors*	Requires selection of sold-separately SFP modules. See ComNet data sheet for number and description of SFP modules	AGENCY COMPLIANCE	
Connectors Optical: Copper: Data:	SFP Dependent RJ-45 RJ-45	* Multimode fiber must meet or ex Single mode fiber must meet or e † May be extended to humidity with	xceed fiber standard ITU-T G.652

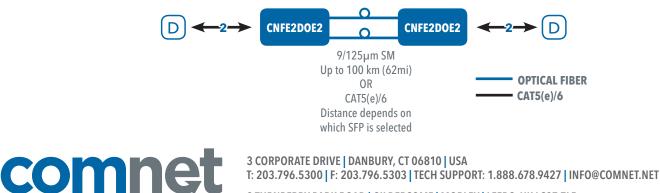
## **ORDERING INFORMATION**

	Part Number	Description	Maximum Distance <sup>‡</sup>	
	CNFE2DOE2	2 Port 10/100 Mbps Terminal Server	See SFP Modules data sheet for optional distances, fiber type and connector type.	
	Accessories Options	9 Volt DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included) RJ-45 to Terminal Block Cable Add suffix '/C' for Conformally Coated Circuit Boards (Extra charge, consult factory)		
DIN-Rail Mounting Adaptor Plate Kit – With mounting hardware (Optional, order model DINBKT1)			dware (Optional, order model DINBKT1)	

NOTE: This product requires a fiber installation with a minimum 30 dB connector return loss. The use of Super Polish Connectors is recommended. Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J. In a continuing effort to improve and advance technology, product specifications are subject to change without notice.

## **TYPICAL APPLICATION**

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