

Ethernet Serial Device Servers for RS-232 and RS-485

Ethernet Interfaces

NI ENET-232 Series, NI ENET-485 Series

- NI Ethernet TCP/IP interfaces
100BaseTX (100 Mb/s)
10BaseT (10 Mb/s)
- Compatible with PC serial port
- 2 and 4 ports
- Handles RTS/CTS hardware handshake lines
- 128 B transmit and receive FIFOs
- DHCP or manual IP address assignment
- Communicates with up to 31 devices
- Automatic transceiver-control mode for 2-wire RS-485 devices
- Cable lengths up to 1.2 km (4,000 ft)

Recommended Software

- LabVIEW
- LabWindows/CVI
- Measurement Studio
- Lookout
- C/C++
- Visual Basic
- Any package that uses the Microsoft serial driver interface

Driver Software (Included)

- NI-SDS for Windows 2000/XP/NT
- NI-VISA for Linux/Solaris

ENET-232

- RS-232 interface
- 230.4 kb/s maximum transfer rate
- Cable length up to 15.6 m (50 ft)

ENET-485

- RS-485 or RS-422 interface
- 460 kb/s maximum transfer rate



Overview

The National Instruments ENET-232 and ENET-485 serial device servers connect either 100BaseTX (100 Mb/s) or 10BaseT (10 Mb/s) Ethernet networks to asynchronous serial ports for communication with serial devices. You can buy serial device servers with either 2 or 4-port options and use standard RS-232, RS-422, or RS-485 communications. Kits include driver software for Windows 2000/XP/NT. You can install and use these serial device servers as standard serial ports from your existing applications or with applications written with NI-VISA. Development environments, such as Visual Basic, Visual C++, and Excel, as well as National Instruments LabVIEW, LabWindows/CVI, Measurement Studio, and Lookout application software products, can access the add-in serial ports using standard serial I/O functions.

Description

The TCP/IP communication protocol, which handles all communication between the serial device server and the host PC, runs on embedded firmware in the serial device server. A configuration utility configures the IP address of the serial device server and exposes all additional serial ports to the operating system for immediate use by any application software package using standard Windows serial I/O function calls.

INFO CODES

For more information, or to order products online visit ni.com/info and enter:

enet232
enet485

BUY ONLINE!

Ordering Information

Model	Serial Port	Number of Ports	Part Number
ENET-232/2	RS-232	2	778064-P2*
ENET-232/4	RS-232	4	778064-P4*
ENET-485/2	RS-485/RS-422	2	778065-P2*
ENET-485/4	RS-485/RS-422	4	778065-P4*

*External 9 VDC power supply included

P = Power Cord Type 0 = U.S. 120 VAC 4 = Universal Euro 240 VAC
 2 = Swiss 220 VAC 5 = North American 240 VAC
 3 = Australian 240 VAC 6 = United Kingdom 240 VAC

Dual Rack-Mount Kit187322-02

DIN Rail Mounting Kit777972-01

Specifications

FIFO size 128 bytes
 Maximum transfer rate 460 kb/s
 Ethernet connector RJ-45
 Serial connectors DB-9
 Noise emissions Class A

Power Requirements

+9 VDC 600 mA typical
 1.0 A, maximum
 Dimensions 21.0 by 12.4 by 3.7 cm
 (8.25 by 4.89 by 1.44 in.)

Operating Environment

Ambient temperature -40 to 70 °C
 Relative humidity 10 to 90%, noncondensing

Storage Environment

Ambient temperature -55 to 85 °C
 Relative humidity 5 to 90%, noncondensing

Electrostatic Discharge Protection

Case contact and air discharge ±4 kV
 RS-232 and RS-485 data lines ±15 kV (HBM)

Serial Instrument Control/Connectivity