Digi Connect® ES (Extended Safety)

Terminal Server

Extended safety terminal server is designed for serial over Ethernet applications that require isolation on and between ports.
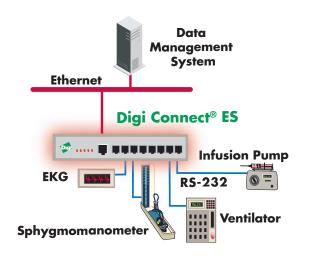
Overview

Digi Connect ES provides mission-critical serial over Ethernet connectivty. It is the first IEC 60601/EN60601 compliant device of its kind and consists of four, eight or 16 galvanic isolated RS-232 serial ports, with a 10/100 Mbps network interface and optional Ethernet switch. Applications include providing Ethernet connections from serial devices such as ventilators, EKGs, patient monitoring systems, infusion pumps and glucose meters to the central data management system.

Galvanic isolation provides extended electrical safety. There is no electrical path for current to earth ground, ensuring no electrical shock when making physical contact with the Digi Connect ES. There is no electrical path from port to port, ensuring a ground fault will not affect the operation of the Digi Connect ES or the operation of any device connected to it.

Digi's patented RealPort technology makes it possible to establish a connection between the host and a networked serial device by creating a local COM or TTY port on the host computer. Incoming/outgoing and Telnet sessions on each port give system administrators a high level of control over networked serial devices.

Related Product

ConnectPort™ TS 4x4

Application Highlight

Features/Benefits

- **4/8/16-port RS-232 serial-to-network connectivity**
- **IEC 60601 compliant**
- **Galvanic isolation on all ports**
- **Wall mountable**
- **Patented Digi RealPort® technology provides local serial port functionality**
- **RealPort with encryption available for SSL-based protection for additional security**
- **Ports may be shared between multiple hosts running different operating systems**

Specifications	Digi Connect® ES
Features	
Management	HTTP/HTTPS, CLI or Telnet, Optional secure enterprise management via Digi Connectware® Manager
Protocols	UDP/TCP, DHCP, Extended Telnet RFC 2217, Telnet, Reverse Telnet, Rlogin & Auto Connect, TFTP
Security	SSL, SSL/TLS, SSHv2, FIPS 197 (serial ports), SNMPv2
Software	Device-initiated patented RealPort COM port redirector and RFC 2217, Python scripting, Custom development environment
Status LEDs	Power, Locator, Serial and Ethernet link/activity
Operating Systems	AIX, HP-UX, Linux®, SCO® OpenServer™ 5, SCO® OpenServer™ 6, Solaris™ Intel, Solaris™ SPARC, Windows® XP, Windows Server® 2003, Windows Server® 2008, Windows Vista®
Dimensions (L x W x D)	9.30 in x 10.60 in x 2.10 in (23.5 cm x 26.9 cm x 4.20 cm)
Weight	3.0 lb (1.34 kg)
Interfaces	
Serial	
Ports	4/8/16 separately isolated RS-232 ports (2.5kV)
Throughput	Up to 230 Kbps
Signal Support	TXD, RXD, RTS, CTS, DTR, DSR, DCD
Ethernet	
Ports	1 uplink, Optional 4-port switch
Physical Layer	10/100 Base-T separately isolated (1.5kV)
Mode	Full or half duplex
Power Requirements	
Power Supply	Internal 100-240VAC, 50-60 Hz 0.2A max
Surge Protection	4 kV burst (EFT) per-4-4, 2 kV surge per EN61000-4-4 4kV isolation input to output 2kV surge per EN61000-4-5
Environmental	
Operating Temperature	0° C to 55° C (32° F to 130° F)
Storage Temperature	-30° C to +85° C (-22° F to +185° F)
Relative Humidity	5 to 95% (non-condensing)
Serial Port Protection (ESD)	+15 kV human body model
Regulatory Approvals	
Emissions	EN55011, EN55022, AS/NZS CISPR 22, ICES-003, FCC P15 Subpart B Class A
Safety	IEC/EN60950-1, CAN/CSA 22.2 60950-1-3, UL 60950-1, IEC 60601-1, UL 60601-1, EN60601-1, EN60601-1-2
Immunity	EN55024, ICES-003