EDG-4508P/16P
EDG-4508(R)+/16(R)+

8/16-port RS-232/422/485 to Dual LAN Ethernet Data Gateway

8/16-port RS-232/422/485 to Ethernet Data Gateway with Front/Rear Wiring

NEW

EDG-4516P

EDG-4516+

FCC CE

Features

- RS-232/422/485 Serial Communication, up to 8 or 16 port
- Supports 10/100Base-T Ethernet network
- Dual LAN for Ethernet redundant (EDG-4508P/16P)
- Supports serial high transmission speeds up to 230 kbps
- Provides Virtual COMport, TCP/IP and UDP operation modes (EDG-4508P/16P)
- 8 DI/O for alarm/event control
- Provide rich configuration ways: Serial Console, Windows utility, telnet and Web configure
- Supports an advanced security mechanism to avoid unauthorized access
- Auto connection recovery
- Remote download firmware
- Easy-managing Port Mapping Utility and configuration utility for Windows® 98/NT/2000/XP
- Buzzer for easy locate (EDG-4508P/16P)
- Rack mounted
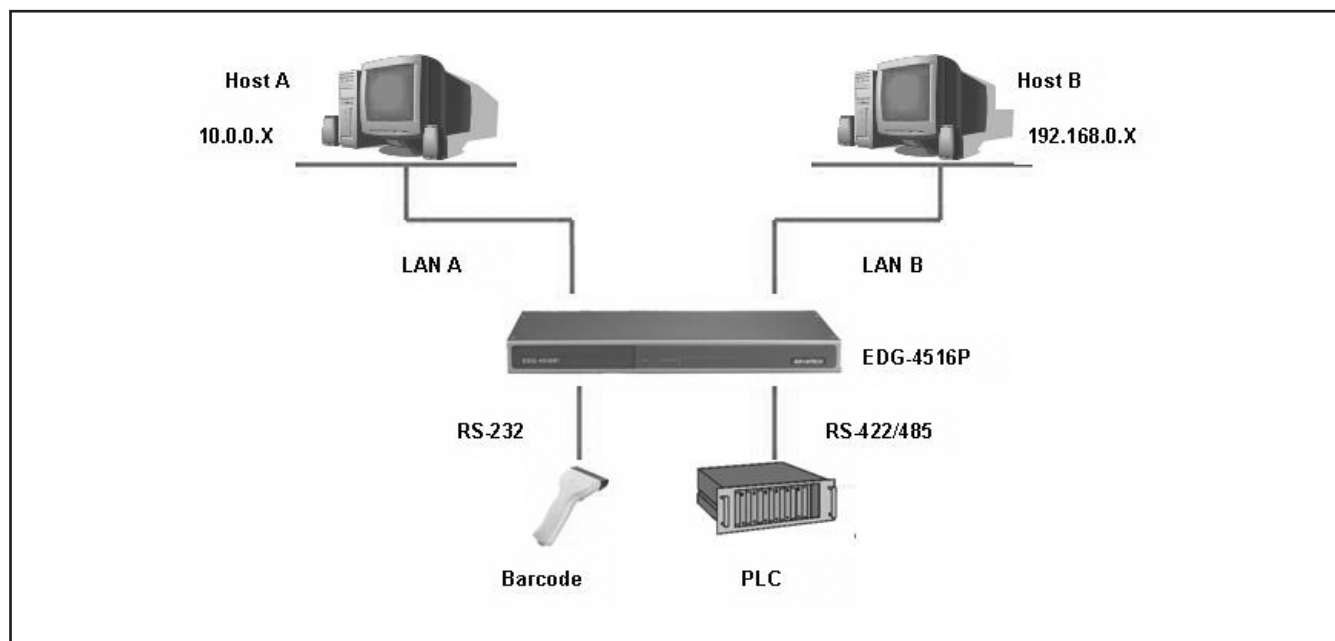- Rear wiring (EDG-4508R+/16R+, EDG-4508P/16P)

Introduction

EDG-4508 and EDG-4516 are industrial-grade network-based serial device servers for connecting up to 8 or 16 serial RS-232/422/485 device, such as CNCs, PLCs, scales and scanners, directly to Ethernet network. Compared with similar product on the market, EDG-4508 and EDG-4516 are low cost, but with high performance and reliability.

EDG-4508 and EDG-4516 provide 8 and 16 ports of serial communication. For many applications, you could also use EDG-4508 and EDG-4516 to remote monitor and control your serial device. Furthermore, EDG-4508 and EDG-4516 also build-in 4 channel digital inputs and 4 channel digital outputs for alarm or event control. EDG-4508 and EDG-4516 offer different ways to configured through windows utility, COM port mapping utility or serial interface console, these configuration methods make it easy manage many EDG-4508 and EDG-4516 or serial devices on your network.

EDG-4508P and EDG-4516P are new designs for particular applications. Occasionally, some industrial applications encounter unstable networks, so EDG-4508P and EDG-4516P provide 2 LAN connections, enabling access to two different individual LAN domains, if one of domain is unreliable or goes down, another LAN can still operate, keeping your applications working constantly 24/7. EDG-4508P and EDG-4516P also provide an universal operation mode, no matter which operating system you use, with TCP/IP and an UDP socket API you can build up your own applications remotely and flexibly.

Architecture

Specifications

Ethernet Communication

- **Compatibility** IEEE802.3, IEEE802.3u
- **Speed** 10/100Mbps
- **Connectors** 1 x RJ-45
  2 x RJ-45 (Only for EDG-4508P/16P)

Serial Communication

- **Type** RS-232/422/485
- **Connectors** 8 * RJ-48 (EDG-4508)
  16 * RJ-48 (EDG-4516)
- **Ports** 8 (for EDG-4508)
  16 (for EDG-4516)
- **Data bits** 5,6,7,8
- **Stop bits** 1,1.5,2
- **Parity bits** Odd,even,none,space,mark
- **Baudrate** 50bps ~ 230Kbps
- **Data Signals** TxD,RxD,CTS,RTS,DTR,DSR,DCD,RI,GND (RS-232)
  TxD+,TxD-,RxD+,RxD-,GND (RS-422)
  Data+,Data-,GND (RS-485)
- **Digital I/O** 4DI & 4DO
  Digital Input:
  Logic level 0 : 0 ~ 4.2 V , close to GND
  Logic level 1 : 4.4 ~5 V , open
  Digital Output:
  Open collector up to 30 V, 200 mA Max load

Protection

- **Serial protection** 15 KV$_{ESD}$ for serial singnal
- **Software**
- **Drivers supported** Windows® 98/NT/2000/XP
- **Utility Software** Auto-detecting configuration utility (up to 128 devices)
  Port mapping utility
- **Operation mode** Virtual COMport
  TCP Server (Polling) (only for EDG-4508P,EDG-4516P)
  TCP Client (event handling)
  (only for EDG-4508P,EDG-4516P)
  Pair Connection (Peer to Peer)
  (only for EDG-4508P,EDG-4516P)
  UDP (only for EDG-4508P,EDG-4516P)
  Ethernet Modem (only for EDG-4508P,EDG-4516P)
- **Configuration** Configuration utility
  Port mapping utility
  Console serial command line interface configuration
  Web interface configuration
  (only for EDG-4508P,EDG-4516P)
  Telnet command line interface configuration
  (only for EDG-4508P,EDG-4516P)

Mechanics

- **Enclosure** SECC Chassis
- **Mounting** Rack
- **Dimension** 44 x 442 x 190 mm (H x W x D)

General

- **Certification** CE,FCC ClassA
- **LED** Power, Status
  Ethernet:Speed,Link
  Serial:Tx,Rx

Power

- **Power Input** 90 ~ 260 V$_{AC}$, 47 ~ 63 Hz
  2 x Unregulated 12~48 V$_{DC}$
  (only for EDG-4508P/48 V, EDG-4516P/48 V)
- **Fault output** Present (only for EDG-4508P/48 V, EDG-4516P/48 V)
- **Power consumption** 10 W (EDG-4516)
  8 W (EDG-4508)

Environment

- **Operating Temp.** 0~55° C (32~131° F)
- **Storage Temp.** -20~80° C (-4~176° F)
- **Operating Humidity** 20%~95% (non-condensing)
- **Storage Humidity** 0%~95% (non-condensing)

Ordering Information

- **EDG-4508P** 8-port RS-232/422/485 to Dual LAN Ethernet Data Gateway
- **EDG-4516P** 16-port RS-232/422/485 to Dual LAN Ethernet Data Gateway
- **EDG-4508+** 8-port RS-232/422/485 to Ethernet Data Gateway with front wiring
- **EDG-4516+** 16-port RS-232/422/485 to Ethernet Data Gateway with front wiring
- **EDG-4508R+** 8-port RS-232/422/485 to Ethernet Data Gateway with rear wiring
- **EDG-4516R+** 16-port RS-232/422/485 to Ethernet Data Gateway with rear wiring
- **EDG-4508P/48V** 8-port RS-232/422/485 to Dual LAN Ethernet Data Gateway w/48 V$_{DC}$ Power input
- **EDG-4516P/48V** 16-port RS-232/422/485 to Dual LAN Ethernet Data Gateway w/48 V$_{DC}$ Power input

*all items include 1 PC 30cm RJ-48 to male DB9 RS-232/422/485 cable

- **OPT1A** 1 m RJ-48 to male DB9 RS-232/422/485 cable
- **OPT1D** 30 cm RJ-48 to male DB9 RS-232/422/485 cable
- **OPT1G** 1 m RJ-48 to male DB25 RS-232/422/485 cable
- **OPT1H** 1 m RJ-48 to female DB25 RS-232/422/485 cable

Dimension