


## Ethernet Digital I/O Server

	Serial Port1	Serial Port2	5pin terminal Block	Digital IO
EIO 188	RS232/422/485	RS232		8 Point DIO

### Feature

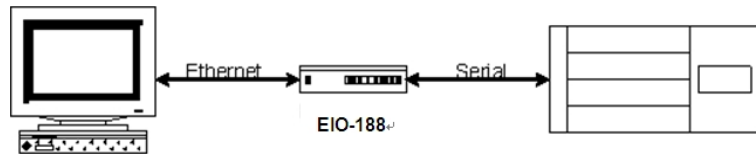
- DIN rail or Panel mount
- Supports 10/100 Mbps Ethernet
- Supports LAN and WAN communications
- In Server mode supports individual client sessions for security.
- Management access password protected
- Software for Windows NT/98/ME/2000/XP/Vista(x86 and x64)/Win7 (x86 and x64)
- Supports socket connection, TCP server, TCP client, and UDP.
- Supports up to 8 TCP connections in TCP server mode.
- Heart beat connection ensures reliable TCP connection against power failure or network disruption.
- Support Slave mode. 1Device server which connect Ethernet could control 31 Slave mode (RS485)
- Support SNMP Get and Set function.
- 2 Serial ports,Port1 do RS232/4322/485 Communication, Port2 could control 8 point digital I/O(RS232)
- 8 point digital Input, dry contact or wet contact, 8 point digital output
- Watch dog timer 1.34sec

### Overview

The Ethernet Digital I/O Server connects serial Devices and Support Digital I/O , Ethernet LAN/WAN providing a reliable communication connection. Existing Windows based serial software using standard Windows API does not have to be modified communicate over an Ethernet LAN to a serial device. The virtual COM port will make this an easy transition

#### Direct IP Mode

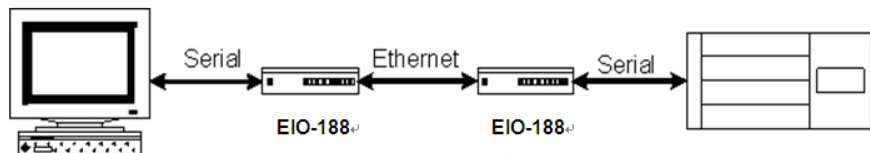
Direct IP connections allow applications using TCP/IP or UDP/IP network socket programs to communicate with the asynchronous serial port on the EIO-188. In this type of application the EIO-188 is configured to TCP or UDP server. The socket program running on the PC establishes a communication connection with the EIO-188. The raw data is sent directly to and from the serial port.



The virtual COM driver is a TCP or UDP client. Once the connection is made, the LAN is transparent to the serial device. Applications work just as if the serial device is connected a host's physical COM port. The virtual COM port converts the application's data into IP packet destined for the EIO-188, which in turn converts the IP packet back to serial data.

### Paired Mode

Paired mode is also called serial tunneling. When this type of configuration is selected, No additional software is needed to install in a host PC. In fact a PC is not required to make the connection. Any two dumb serial devices that can communicate with each other through a serial link will be able to communicate using two EIO-188s and the LAN.



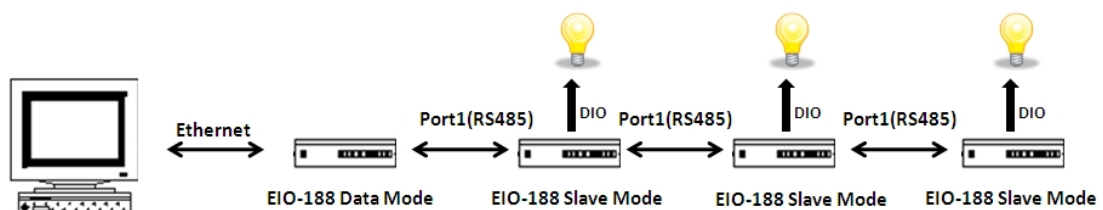
Two EIO-188s are configured with one setup as a TCP or UDP client and the other to TCP/UDP server. When setting up the Server, the Remote IP address section must contain the address of the Client. This will allow the Client's IP address to pass the IP address-filtering feature of the Server. Conversely, the Remote IP address of the Client must contain the Server's IP address.

### Heart Beat

The EIO-188 provides a convenient way to establish reliable communications between two devices. Communication port 5300 is reserved for the Heartbeat Protocol. If a loss connection occurs the Heart Beat feature will try to reconnect the TCP data connection every 5 seconds until communications is established again.

### Slave Mode

Slave Mode is Serial port1 connect Serial port2(Digital IO) than User could use 1 device server to control 31pcs slave device , Slave Mode need set the switch 1:ON 2:OFF

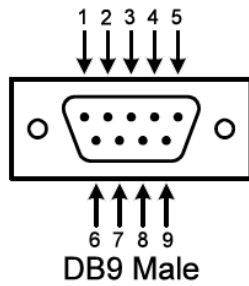


## Specifications

Serial	
Serial Buffer:	<b>Output:</b> 64K bytes <b>Input:</b> 8K bytes per port
Serial Connection:	DTE – BD-9 male & 5 Pin terminal block
Serial Interfaces:	RS-232 - TX, RX, RTS, CTS, DTR, DSR, DCD, GND RS-422 – TX+, TX-, RX+, RX-, RTS+, RTS-, CTS+, CTS-, GND RS-485 - Data +, Data -, GND
COM Port Setting	
Data Rate:	110 bps to 230.4 k bps
Parity:	none, even, odd, mark, space
Data Bits:	5, 6, 7 or 8
Stop Bits:	1, 1.5 or 2
Network	
LAN:	10/100 Mbps Auto-detecting – 10 Base T, 100 Base TX
Protocol:	TCP, UDP, IP, ARP, DHCP, Telnet, HTTP, ICMP
Digital I/O	
Input	8 point input, Dry contact or wet contact (8 DI/ 1power/1common)
Output	8 point output (8 DO/8 CO/ 2 power / 2common)
Power Requirements	
Input Voltage	7 to 30VDC
Current	500 mA
Physical Characteristics	
Housing	Aluminum
Weight	
Dimensions	114mm*143mm*28mm (4.5 in*5.6in*1.1in)
Environmental Limits	
Operating Temperature	0 to 70 °C (32 to 158 °F)
Storage Temperature	-20 to 90 °C (-4 to 194 °F)
Humidity:	0 – 90% Non-Condensing
Approvals	
Approvals	CE, FCC

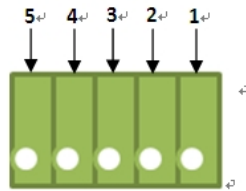
## Pin Assignment

DTE – BD-9 male



DB9 M Pin	RS232	RS422	RS485
1	DCD	RX-	--
2	RXD	RX+	--
3	TXD	TX+	DATA+
4	DTR	TX-	DATA-
5	GND	GND	--
6	DSR	CTS-	--
7	RTS	CTS+	--
8	CTS	RTS+	--
9	RI	RTS-	--

5 Pin terminal block



Pin	5	4	3	2	1
<b>RS232</b>	GND		TXD	RXD	
<b>RS422</b>	GND	TXD(-)	TXD(+)	RXD(-)	RXD(+)
<b>RS485</b>	GND	D (-)	D (+)		

Digital I/O 30 pin terminal block

