IP-Port
Network adapter 10/100 Mbps Datasheet

Description

IP-Port is a network adapter for industrial use that connects equipment with serial interfaces (RS232/RS422/RS485) – to a standard Ethernet network with TCP/IP protocol (LAN, WAN, Internet, Intranet).

The communication is fully transparent. Ethernet TCP/IP is a well developed network technology and widespread standard, which gives great advantages by e.g. simpler integration.

IP-Port replaces serial cables and modems by using existing networks. This will decrease cost due to simpler installations and maintenance, and lower operating costs.

IP-Port is a general and independent product that is easy to integrate into existing systems. Different system configurations can be achieved by using one or several ***IP-Ports***.

IP-Portt is a DIN rail model with Dsub and Terminals connectors.

System configurations

Serial point-to-point connection over networks. Connect serial ports over networks (LAN, WAN, Internet, Intranet) using a ***IP-Port*** on each end. Existing own equipment can be connected without modification.

As a dial-up modem over networks. Connect own equipment intended for modem to a network by replacing each modem by a ***IP-Port*** that simulates modem connection, where the phone number is replaced by an IP address in the AT command.

Remote access to own equipment over networks. Use own central applications or terminal programs (e.g. Telnet) to remotely access own equipment over networks by placing a ***IP-Port*** at the equipment.

Web. Use ***IP-Port*** with web pages for applications over Internet, e.g. show/control/configure own equipment.

Features

- Serial port RS232 with all Modem signals
  Selectable serial data format and speed 300-115200 bps
  Simulation of modem with AT commands
- Serial port RS232 with only Data signals
  Selectable serial data format and speed 300-115200 bps
- Serial port RS422/RS485 with 4-wire or 2-wire
  Selectable serial data format and speed 300-115200 bps
  4-wire RS422 or 2-wire RS485
- 10/100 Mbps Fast Ethernet10Base-T/100Base-TX
  TCP/IP protocol
  One default gateway
  Fixed or dynamic IP-address with DHCP
- External power 12V-24V AC or 12-24V DC,
  max 150mA
- Mounting on DIN rail, 23b x 75h x 110d
  Weight 105 g
- Configuration for parameters
  Terminal program via serialport
  Web browser via network
- Diagnostics with LED and logging
  Green LED for power and started
  Green LED for Link/Activity on network
  Yellow LED for activity on serial port-1
  Yellow LED for activity on serial port-2
  Log for actions

IP-Port

Function

- Each ***IP-Port*** has its own IP address and each port its own port number
- Fixed or dynamic IP address with DHCP
- Connects as Client or Server
  Automatically on received serial data or via network disconnects automatically on no data (timeout)
- Data communication is fully transparent
- Serial port control signals for flow and modem control
- Simulates modem with AT commands, enabling connection of equipment intended for modem
- Handles routing with netmask and gateway for divided network
- TCP/IP compatible for standard applications such as Ping and Telnet
- All parameters – IP addresses, TCP ports, data format, speed – can be configured from web browsers via network, or from terminal program via serial port
- Download of program to Flash memory from computer via serial port, for easy update
- ***IP-Port*** can be customised with own functions and special interfaces. Typical functions can be protocol, encrypting, polling, etc.

IP-Port
Network adapter

WHI Konsult AB
Scheelegatan 11 • 112 28 Stockholm
Tel. +46 8 449 05 30 • Fax +46 8 449 05 39
+46 705 36 77 22

Croptal AB
Svarvarvägen 1 • 132 38 Saltsjö-Boo
+46 707 71 53 00

E-post info@ip-port.se
Webb http://www.ip-port.se

Connections and Indicators

Reset button R
Short pressing, Reset
Long pressing (3 s), Activates configuration via serialport

Indicators P L/A S1 S2 T
P Green LED power and started
L/A Green LED RJ45 link and activity on network
S1 Yellow LED RJ45 activity on serial port-1
S2 Yellow LED activity on serial port-2
T Yellow LED status

Network port TP
RJ45-connector Fast Ethernet 10/100 Mbps TP

Serial port RS232 Modem S1
DB9F connector for RS232 modem (DCE)

1.	DCD	Out	Data Carrier
2.	RD	Out	Receive Data
3.	TD	In	Transmit Data
4.	DTR	In	Data Terminal Ready
5.	GND		Ground
6.	DSR	Out	Data Set Ready
7.	RTS	In	Request To Send
8.	CTS	Out	Clear To Send
9.	RI	Out	Ring

Serial port RS232 S2
Terminal-3 connector for RS232 (DTE)

1.	GND		Ground
2.	RD	In	Receive Data
3.	TD	Out	Transmit Data

POWER
Terminal-3 connector for power

4.	AC/DC+	12/24V AC	+12/24V DC
5.	AC/DC-	12/24V AC	0V DC
6.	P-GND	Protected ground	

Serial port RS422/RS485
Terminal-6 connector for RS422/RS485

7.	V-	0V
8.	R+/T+	4-wire/2-wire
9.	R-/T-	4-wire/2-wire
10.	V+	+5V
11.	T+	4-wire
12.	T-	4-wire