DATA SHEET



PH232Ex2

#2 RS-232 Serial Port Over Ethernet, Terminal Server/Client

IPEX

(IP Electronix)

13 January 2022

Doc No: PH232Ex2-DS-001

CONTENTS

1. INTRODUCTION 3
2. SERIAL INTERFACE (RS-232) 3
3. ETHERNET INTERFACE 4
4. PROTECTION 4
5. GENERAL SPECIFICATIONS 4
6. POWER SUPPLY 4
7. PHYSICAL CHARACTERISTICS (THE DEVICE ONLY) 4
8. PHYSICAL CHARACTERISTICS (IN THE BOX) 5
9. ENVIRONMENTAL LIMITS 5

ipelectronix.com

www.ipelectronix.com

1. INTRODUCTION

IPEX PH232Ex2 bidirectional communication terminal server/client is a simple solution for connecting serial devices to a network which results in having 2 RS-232 serial ports over Ethernet network. This converter uses transparent communicate protocol, so it is not required to understand complex Ethernet TCP/IP protocol, and no modification in serial programs is needed. It operates as a Real COM, TCP Server, TCP Client, UDP Server and UDP Client Full-Duplex converter and supports bidirectional connection.

PH232Ex2 is designed for industrial usage and is useful for connecting any device with a serial interface to a computer via Ethernet supported network like LAN, WAN … and can be used in Industrial Automation, Telecommunications, SCADA Systems, DCS Systems ….

Protection against Surge, ESD and EMI is implemented in its design and it has 3kV insulation between Ethernet and RS-232 sides. Furthermore, all the RS-232 ports are insulated from each other too.

2. SERIAL INTERFACE (RS-232)

- **Number of Ports:** 2;
- **Serial Standard:** Meets or Exceeds the Requirements of TIA/EIA-232-F and ITU v.28 Standards;
- **RS-232 Signal (Full Handshake Support):** TxD, RxD, DTR, RTS, DSR, CTS, RI, GND;
- **Baud Rate Type:** Configurable;
- **Baud Rates:** 50, 75, 110, 150, 300, 450, 600, 900, 1200, 1800, 2400, 3600, 4800, 7200, 9600, 14400, 19200, 28800, 38400, 56000, 57600, 76800, 115200, 153600, 184320, 230400, 307200, 460800, 921600 bps; Selectable;
- **Data Bits:** 5, 6, 7, 8; Selectable;
- **Stop Bits:** 1, 1.5, 2; Selectable;
- **Parity:** Even, Odd, None, Mark and Space; Selectable;
- **Flow Control:** Hardware (RTS/CTS, DTR/DSR), Software (Xon/Xoff) and None;
- **Data Buffer:** 4000 Bytes (2k Bytes Transmit, 2k Bytes Receive);
- **Connector:** DB9 Male (DTE);
- **Maximum Communication Distance:** 15m.

ipelectronix.com

www.ipelectronix.com

3. ETHERNET INTERFACE

- **Number of Ports:** 1;
- **Speed:** 10/100 Mbps, auto MDI/MDIX;
- **Connector:** 8-pin RJ45 Magnetic;
- **Magnetic Isolation Protection:** 1.5 KV built-in;
- **Network Protocols:** ICMP, IP, TCP, UDP, DHCP, Telnet, DNS, ARP, HTTP;
- **Remote Configure:** Web Configuration is supported.

4. PROTECTION

- **Isolation Protection:** 3kV Instantaneous, 500V DC Continuous;
- **Surge Protection:** Embedded 1500W Surge Protection;
- **Magnetic Isolation:** 1.5 kV Built-in;
- **ESD Protection:** RS-232 Bus-Pin ESD Protection Exceeds ±15 kV Using Human-Body Model (HBM).

5. GENERAL SPECIFICATIONS

- Power **(Green)** LED Indicator;
- POE **(Green)** LED Indicator;
- TCP Server, TCP Client, UDP **(Green)** LED Indicator;
- Parity Error (PE) **(Red)** LED Indicator;
- Transmit **(Blue)** LED Indicator;
- Receive **(Yellow)** LED Indicator;
- **Guarantee Period:** 1 Year;
- **Warranty Period:** 5 years.

6. POWER SUPPLY

- **Power Supply Input Voltage:** 8V ~ 48V DC;
- **Power Consumption:** ~ 2W (Max.).

7. PHYSICAL CHARACTERISTICS (THE DEVICE ONLY)

- **Housing:** Metal;
- **Weight:** 350g;
- **Dimensions:** 145mm x 118mm x 27mm (5.70in x 4.65in x 1.06in).

ipelectronix.com

www.ipelectronix.com

8. PHYSICAL CHARACTERISTICS (IN THE BOX)

- **Housing:** Carton;
- **Weight:** 630g;
- **Dimensions:** 200mm x 135mm x 65mm (7.87in x 5.31in x 2.56in).

9. ENVIRONMENTAL LIMITS

- **Operating Temperature:** -10°C to +70°C (+14°F to +158°F);
- **Operating Humidity:** 5% to 95% RH;
- **Storage Temperature:** -40°C to +85°C (-40°F to +185°F).

ipelectronix.com

www.ipelectronix.com