

DATA SHEET



A380N

#2 RS-232 & #2 RS-485/422 Over USB INSULATED MULTIPORT

IPEX

(IP Electronix)

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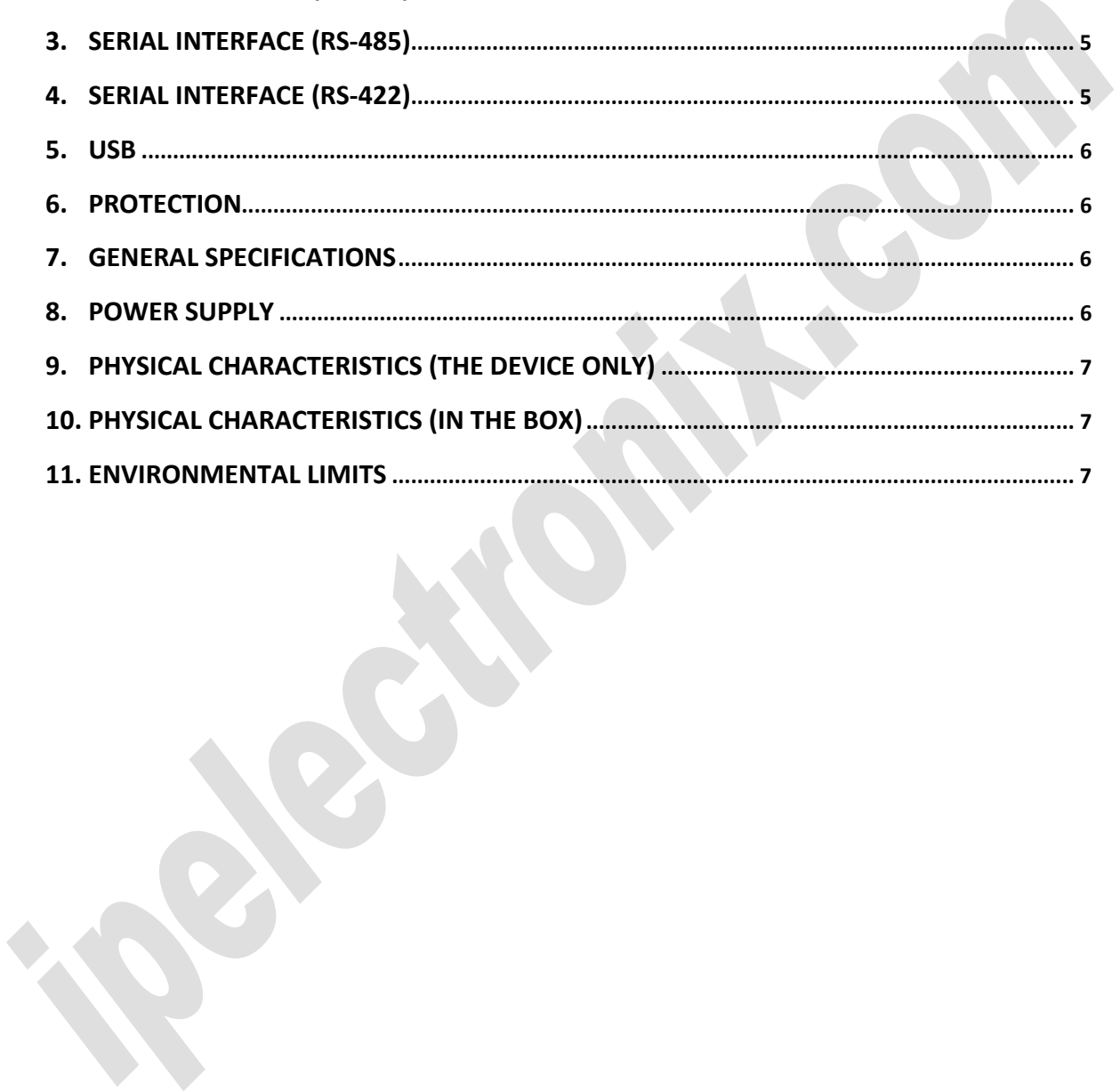
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1. INTRODUCTION

IP Electronix A380N is an USB Adapter Multiport that provides #4 Serial COM Ports via its USB connection and is compatible with RS-232 standard devices RXD, TXD, RTS, CTS, DTR, DSR, GND; Also, RS-485 standard devices differential (Data+ & Data-); and RS-422 standard devices differential (TX+, TX- & RX+, RX-) signals.

A380N is fully Plug & Play and enables your laptop or workstation with the ability to communicate between a USB port and up to #2 RS-232 and #2 RS-485/422 serial peripherals with baud-rate from 300bps to 230400bps simultaneously.

A380N supports Point-to-Point and Point-to-Multi Point Party Line network topologies. Since RS-485 is a Half-Duplex standard, switching between Transmit and Receive is done automatically and no further signal (such as RTS) is required.

A380N supports a wide range power supply and is working with DC voltage between 8V to 48V. Protection against Surge, ESD and EMI is considered in its design and also has 3kV insulation between USB and RS-232/RS-485/422 sides. Furthermore, all the ports are insulated from each other too.

A380N is designed for industrial usage and is useful for Industrial Automation, Telecommunications, SCADA Systems and DCS Systems ...

A380N comes complete with drivers for Microsoft Windows. Drivers are also available for Linux, Mac OS and Android.

2. SERIAL INTERFACE (RS-232)

- **Serial Standard:** EIA RS-232 Standard;
- **RS-232 Signal (Full Handshake Support):** TxD, RxD, RTS, CTS, DTR, DSR, GND;
- **Baud Rates:** 300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 230400 bps;
- **Data Bits:** 5, 6, 7, 8;
- **Stop Bits:** 1, 1.5, 2;
- **Parity:** None, Even, Odd, Space, Mark;
- **Flow Control:** RTS/CTS, DTR/DSR, or XON/XOFF, or None;
- **Connector:** DB9 Male (DTE);
- **Maximum Communication Distance:** 15m.

3. SERIAL INTERFACE (RS-485)

- **Serial Standard:** EIA RS-485 Standard;
- **RS-485:** Asynchronous Half-Duplex 2-wire;
- **RS-485 Signal:** Data+, Data-, GND;
- **RS-485 Data Direction Control:** ADDC (Automatic Data Direction Control);
- Supports **Point-to-Point** and **Multidrop** Configuration;
- **Transmission Medium:** Twisted Pair Cable or Shielded Wire;
- **Protocol:** Differential 2-wire Half-Duplex RS-485;
- **Maximum Communication Distance:** 1200m (4000 feet);
- **Loading:** RS-485 Side Support up to 32 Nodes;
- **Plug & Play:** Online Module Insertion and Removal;
- **Transient Suppression** on RS-485 Communication Lines;
- **Connector:** Screwed Terminal.

4. SERIAL INTERFACE (RS-422)

- **Serial Standard:** EIA RS-422 Standard;
- **RS-422:** Asynchronous Full-Duplex 4-Wire;
- **RS-422 Signal:** Tx+, Tx-, Rx+, Rx-, GND;
- Supports **Point-to-Point** and **Multidrop** Configuration;
- **Transmission Medium:** Twisted Pair Cable or Shielded Wire;
- **Protocol:** Differential 4-wire Full-Duplex RS-422;
- **Maximum Communication Distance:** 1200m (4000 feet);
- **Loading:** RS-422 Side Support up to 32 Nodes;
- **Plug & Play:** Online Module Insertion and Removal;
- **Transient Suppression** on RS-422 Communication Lines;
- **Connector:** Screwed Terminal.

5. USB

- **Compatibility:** USB 1.0, 1.1 and 2.0 Standard Compatible;
- **Speed:** Hi-speed USB 2.0 Supported (up to 480 Mbps);
- **Additional I/O or IRQ:** Not Required;
- **Driver Supported:** Microsoft Windows, Linux, Mac OS and Android (32 & 64 Bits) Operating Systems;
- **Cable:** USB Type A connector (Type A to Type B cable provided);
- **USB Cable Length:** 1.5m;
- **Connector:** USB type B.

6. PROTECTION

- **Insulation Protection:** 3kV Instantaneous, 500V DC continuous;
- **Surge Protection:** Embedded 1500W Surge Protection;
- **Magnetic Isolation:** 1.5 kV Built-in;
- **ESD Protection:** 15 kV Built-in.

7. GENERAL SPECIFICATIONS

- Power (**Green**) LED Indicator;
- USB (**Green**) LED Indicator;
- Transmit (**Blue**) LED Indicator for all ports;
- Receive (**Yellow**) LED Indicator for all ports;
- **Guarantee Period:** 1 Year;
- **Warranty Period:** 5 years.

8. POWER SUPPLY

- **Power Supply Input Voltage:** 8V ~ 48V DC;
- **Power Consumption:** ~ 4.5W (Max.).

9. PHYSICAL CHARACTERISTICS (THE DEVICE ONLY)

- **Housing:** Metal;
- **Weight:** 507g;
- **Dimensions:** 218mm x 122mm x 30mm (8.58in x 4.80in x 1.18 in).

10. PHYSICAL CHARACTERISTICS (IN THE BOX)

- **Housing:** Carton;
- **Weight:** 840g;
- **Dimensions:** 220mm x 160mm x 80mm (8.66in x 6.30in x 6.08in).

11. 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).

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