IT-485P5-TTL

RS-485 to 5V TTL Converter（DB9）

INTRODUCTION:

The Intellisystem IT-485P5-TTL is a bi-directional port powered RS-485 to 5V TTL converter in a 9 pin format. It can convert any standard full duplex RS-485 port to a 5V TTL signal and vice versa. The unit is powered from the RS-485 data lines. It also supports data direction auto-turnaround. Therefore, no external power or flow control is required. The data direction auto-turnaround automatically enables the TTL driver when data is present on the RS-485 side making the device plug-and-play, requiring no software drivers. The IT-485P5-TTL has a DB9 male connector on the RS485 side or 5-way terminal block and either a DB9 male connector or 5-way terminal block on the TTL side. Separate terminal block is included in package.

PACKING LIST:

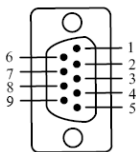IT-485P5-TTL is shipped with following items.

1. IT-485P5-TTL×1

2. Separate terminal block(DB9F to 5 bit) ×2

3. User manual ×1

FEATURES:

1. Port Powered: no external power is necessary

2. Data Direction, auto-turnaround, no flow control is necessary

3. Plug-and-Play (Device is hot-pluggable)

4. Built-in surge protection, static protection and circuit protection

PINOUT CONFIGURATION:

RS-485 port adopt DB9M or 5 bit terminal block, 5V TTL side adopt DB9M or 5 bit terminal block, no power supply Input.

DB9M (Male/needle)

RS-485 side:

Signal	GND	+5V	NC	D+	D-
Pin#	1	2	3	4	5
Function	GND	+5V	NC	D+	D-

5V TTL side:

Signal	GND	NC	TTL OUT	TTL IN	GND
Pin#	1	2	3	4	5
Function	GND	NC	TTL OUT	TTL IN	GND

SPECIFICATIONS:

Standards: EIA RS-485 standard

RS-485 signal: D+, D-, GND

TTL signal: IN, OUT, GND

Baud rate: 300~115200bps

Transfer distance: 5V TTL side: 3m

RS-485 side: 1.2Km

Connectors: RS-485 Side: DB9 Male or 5 Way Terminal Block

5V TTL Side: DB9 Male or 5 Way Terminal Block

Port protect: 600W surge protection, 15KV ESD protection

Power

Power: 5V external power

Environment

Operating temperature: -10°C to 60°C

Storage temperature: -40°C to 85°C

Humidity: 5% to 95% (no condensation)

Appearance

Dimensions: 62.8mm×33.8mm×17.8mm

99.8mm×34.1mm×17.6mm (with terminal block)

Weight: 24g (with terminal block: 50g)

Warranty: 5 years

Troubleshooting instructions:

Connect IT-485P5-TTL to RS-485 port. Tie signals TTL OUT to TTL IN of the IT-485P5-TTL. Using HyperTerminal type program send a character from one and see if it echoes to the other. both TTL input and TTL output functions.
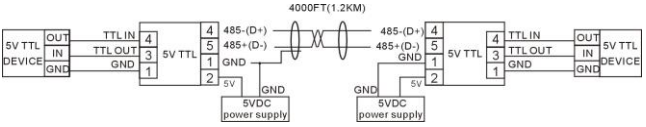
APPLICATIONS:
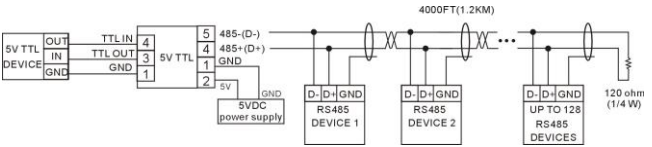
Figure 1: Extending TTL Data Distance

Figure 2: Master/Slave multiple drop configuration

CERTIFICATIONS: