

# IT-232P5-TTL

# RS-232 to 5V TTL Converter (DB9)

## INTRODUCTION:

The Intellisystem TTL-232-5P is a bi-directional port powered RS-232 to 5V TTL converter in a 9 pin format. It can convert any standard full duplex RS-232C port to a 5V TTL signal and vice versa. The unit is powered from the RS-232 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-232 side making the device plug-and-play, requiring no software drivers. The TTL-232-5P has a DB9 female connector on the RS-232 side and either a DB9 male connector or 5-way terminal block on the TTL side. Separate terminal block is included in package.

## PACKING LIST:

TTL-232-5P is shipped with following items.

- 1. TTL-232-5P×1
- 2. Separate terminal block(DB9F to 5 bit) ×1
- 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-232 port adopt DB9F (Female), 5V TTL side adopt DB9M or 5 bit terminal block,no power supply Input.





DB9F (Female/hole)

DB9M (Male/needle)

# RS-232 SIDE:

Signal	DCD	DTR	DSR	RTS	CTS	TX	RX	GND
Pin#	1	4	6	7	8	2	3	5
Function		TIED		TIED		TX	RX	GND

## **5V TTL SIDE:**

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

## SPECIFICATIONS:

Standards: EIA RS-232C standard

RS-232 signal: TX, RX, GND

TTL signal: IN, OUT, GND

Baud rate: 300~115200bps

Transfer distance: 5V TTL side:3m

RS-232 side: no less than 5m

Connectors: RS-232 Side: DB9 Female and

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

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

Power

Power: Port powered from RS-232 data lines

Current consumption: Less than 10mA



## 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

80.3mm×33.4mm×18.6mm (with terminal block)

Material: Iron (shell)

Color: White

Weight: 24g (with terminal block: 36g)

Warranty: 5 years

# TROUBLESHOOTING INSTRUCTIONS:

Perform a loop back test on one TTL-232-5P converter. Tie signals TTL OUT to TTL IN of the TTL-232-5P. Attach the converter to a serial port on a PC and using HyperTerminal send a character from one and see if it echoes to the other. This will test both TTL input and TTL output functions.

## **APPLICATIONS:**



2	RX	TX	2	4	2	TTLIN	OUT
3	TX	RX	2	SVITT	3	TTLOUT	IN SVIIL
$\overline{}$	GND	GND	5		5	GND	DEVICE
5			DBS	F I	DBS	M	GND

HOST/PC/DTE

Connecting the RS232 port to a 5V TTL Device

## **CERTIFICATIONS:**











