**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

**Introduction**

The 3onedata 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.

**Specification**

- **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 Way 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
- **Approvals:** FCC, CE, RoHS approvals

**Packing List**

1. TTL-232-5P×1
2. Separate terminal block(DB9F to 5 bit) ×1
3. User manual ×1