

**Models:**

CONV-USB

**CONV-USB****USB - RS485 Converter****Overview**

The CONV-USB is a bi-directional protocol converter between USB and RS485. It is intended to act as an intermediate translator between a computer's USB port and a Innotech controller network. The Innotech CONV-USB is compatible with PC's running Windows® 7 (32 & 64 bit), XP and 2000.

**Features**

- Fully isolated RS485 communications
- Supports both the Innotech Genesis and Maxim ranges of controllers
- Requires no external power supply or batteries as it is powered from a PC's USB port
- All wire connections are by removable terminals
- LED indication of network traffic
- Supplied with Innotech Tools Software and USB Device Drivers on a CD. Innotech Tools Software that are provided are USB Mate and Innotech DDE Server v5.00

**Applications**

The CONV-USB connects to a USB port of a computer and converts the signals to RS485 format. In this way it can be used to link a PC directly to an Innotech Genesis or Maxim RS485 network. Isolated RS485 circuitry prevents voltage irregularities on the communication cabling from damaging the computer, and reduces the likelihood of communications errors.

- Mobile service tool
- Permanently situated protocol translator

**Specifications****Power Supply**

The Innotech CONV-USB is powered directly from a computer's USB port and requires no other external power supply.

**Temperature Ratings**

Storage: 0°C to 50°C non-condensing  
Operating: 0°C to 40°C non-condensing

**Enclosure/Mounting**

The CONV-USB is housed in a rectangular enclosure and is moulded from flame retardant plastics recognised by UL as UL 94-V0.

Colour: Grey  
Dimensions: 50(w) x 99(h) x 24.5(d)

**Functionality**

The CONV-USB requires that USB Device Drivers, which are provided on an accompanying CD, are installed on the host computer. By selecting the appropriate communications option, using either iComm or Innotech DDE Server v5.00 or greater, the Innotech software suit will seamlessly connect to the Innotech network using the CONV-USB.

**Approvals**

The CONV-USB conforms to:

- EN61326-1:2013 for CE & RCM Labelling
- Title 47 CFR, Part 15 Class A for FCC Marking
- UL listed to UL916, File Number E242628

## Wiring

- DO NOT connect 240VAC to any terminals
- Ensure polarity of the power supply is correct. Centre pin is (+)
- The Comms cable must be organised as a bus topology (Daisy Chained). No "Stubs" are allowed
- The cable used for RS485 Comms must be shielded single twisted pair with 120 ohms characteristic impedance and not exceed 45pF per metre capacitance between conductors

For more information, please refer to the Innotech Network Cabling Manual DS99.04.

TYPE B MALE USB PLUG

NORMAL CABLE FOR CONNECTING TO PC  
IS A TYPE B MALE TO TYPE A MALE USB CABLE

NOTE: MAXIMUM LENGTH OF USB CABLE IS 3 METERS



## Terminal Connections

SHLD 1 Shield from incoming Comms Cable.

- + RS 485 (+) signal.
- RS 485 (-) signal.

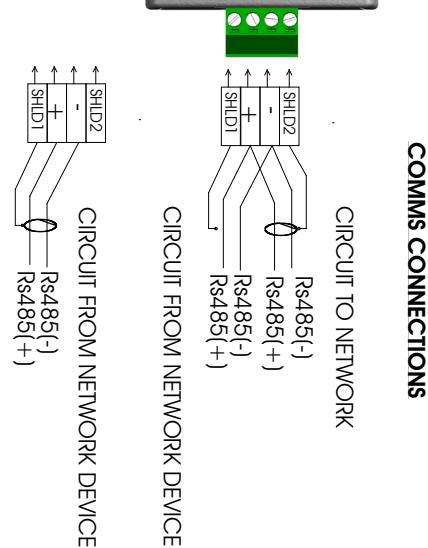
SHLD 2 Shield from outgoing Comms Cable.

## FCC Class A Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Note - This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Modifications to this device, may void the authority granted to the user by the FCC to operate this equipment.



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