

Product Catalog Number	28A11A0	
Supply Characteristics:		
Supply Voltage	BUS Powered (External Power Supply not required)	
Power Consumption Max.	60 mA from USB port	
Communication Characteristics:		
USB	Version	USB 2.0 Compliant
	Signals	D+,D-,VBUS,GND
	Full Speed	12 Mbps
	Connector	USB B type
RS 232 Side	Connector	D type 9 pin Male
	Signals	TX, RX, GND
RS 422/485 Side	Connector	Terminal type
	Signals	1. RS-485: D+, D-, GND 2. RS-422: TX+, TX-, RX+, RX-, GND
		1. RS-485 Data Direction Control - ADDC (automatic data direction control) 2. Terminating Resistor - not connected in device if needed user connect it externally at both far ends. 3. Fail safe Resistor - 4k7 Resistor Pull up & Pull Down on BUS 4. Multi-drop capability in RS485 - 32 unit Nodes without Terminating Resistor & 10 unit nodes with Terminating Resistor. 5. Cable Specification - Twisted Pair with Shield (22-24 AWG) 6. Distance Support - Maximum 1Km .
Baud rate	300 bps to 230 Kbps	
Isolation	1.5 KVrms Galvanic Isolation for 1 min.	
LED Indication	TX, RX Indication	TX Green LED for data from USB Port to RS232/RS485 Port. RX Green LED for data from RS485/RS422 Port to USB Port.
	Communication Mode LED Indication	RS232 Mode:- Red LED1 OFF & LED2 ON
		RS485 Mode:- Red LED1 ON & LED2 OFF
		RS422 Mode:- Red LED1 & Red LED2 ON
Serial Interface Mode Selection RS232/RS485/RS422	Through PC based Utility (USB to Serial Converter Software)	
USB virtual com port Driver support	Operating system: Win-XP, Vista, Win7, Win8 (32 bit) *	
Environmental Characteristics :		
Operating Temperature	0° C to 60° C	
Storage Temperature	-20° C to +70° C	
Humidity	5 to 95% Rh	
Pollution Degree	II	
Degree of Protection	IP20 for terminals	
Enclosure material & colour	ABS+PC & Gray	
Other Characteristics :		
Mounting	Din Rail Type	
Weight	115 gm	
Dimension in mm (W x H x D)	(36 x 90 x 65)	
EMI/EMC Compliance:		
Conducted Emission	CISPR 11 Ed. 4.1 (2004-06) Class A	
Radiated Emission	CISPR 11 Ed. 4.1 (2004-06) Class A	
ESD	IEC 61000-4-2 Ed. 1.2 (2001-04) Level II	
Radiated Susceptibility	IEC 61000-4-3 Ed. 3.0 (2006-02) Level II	
Conducted Susceptibility	IEC 61000-4-6 Ed. 2.2 (2006-05) Level III	
Electrical Fast Transients	IEC 61000-4-4 Ed. 2.0 (2004-07) Level I, Performance Criteria A (As per EN 55024 Sept 1998 Criteria B @ 500V, 1m Cable length)	
Safety Compliance:		
Test Voltage (Input & Output)	IEC 60947-5-1 Ed. 3.0 (2003-11) 1.5 kV	
Test Voltage (All Terminal & Enclosure)	IEC 60255-5-1 Ed. 3.0 (2003-12) 4 kV	
Single fault	IEC 61010-1	
Insulation Resistance	>20 M ohm	
Leakage Current	UL 508 <3 mA	
Environmental Compliance :		
Cold Heat	IEC 60068-2-1 Ed. 6.0 (2007-03)	
Dry Heat	IEC 60068-2-2 Ed. 5.0 (2007-07)	
Vibration	IEC 60068-2-6 Ed. 7.0 (2007-12) 5 g	
Repetitive Shock	IEC 60068-2-27 Ed. 4.0 (2008-02) 40 g, 6 ms	
Non-repetitive Shock	IEC 60068-2-27 Ed. 4.0 (2008-02) 30 g, 15 ms	

USB to RS232/RS485(2W)/RS422(4W)

Cat. No. :

28A11A0



FEATURES :

- USB to RS232/ RS485 2-wire/ RS422 4-wire Conversion.
- Bus Powered by USB, so no need of external power supply.
- PC based software Utility for serial interface mode RS232, RS485, RS422 the Conversion mode of USB convertor
- LED indication for Tx, Rx and mode Indication.
- USB driver support for Virtual com port Windows XP, Vista, Win7, Win8 (32 bit)*
- DIN-Rail mounting
- 1.5 KVrms Galvanic isolation protection for 1 minute.

*For 64 bit support, please e-mail us on 'service@gicindia.com'

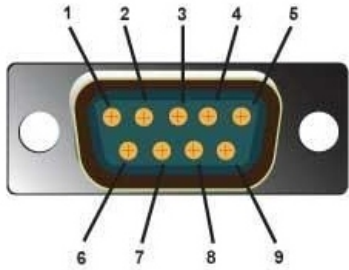
CAUTION FOR DRIVER INSTALLATION:

- During the USB driver installation for 64 bit OS, windows will display Security warning dialog box. Please proceed further by ignoring the security warning & select "Install this driver software anyway". This is safe procedure and tested by GIC.

CAUTION FOR DEVICE INSTALLATION:

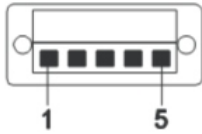
- Use 22-24 AWG shielded cable to prevent cross talk between transmitted signals and reduce the potential of external interference.
- Connect shield of RS485/RS422 cable to GND terminal.

MALE CONNECTOR DB9:



PIN	RS-232
1	-
2	RxD
3	TxD
4	-
5	GND
6	-
7	-
8	-

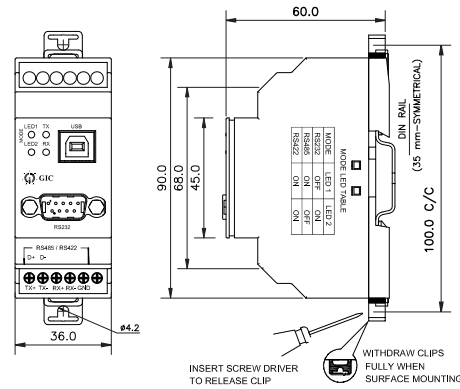
TERMINAL DIAGRAM:



PIN	RS485 (2W)	RS422 (4W)
1	D+	Tx+
2	D-	Tx-
3	-	Rx+
4	-	Rx-
5	GND	GND

Terminating Resistor: "120 OHM RESISTOR" has been provided in polythene bag, along with the product. Not connected in device. If needed user can connect it externally at both far ends.

Overall product dimensions and mounting details :

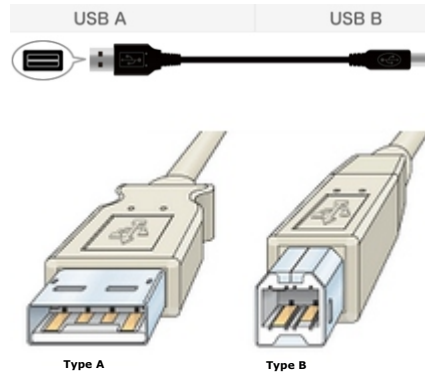


Note:

1. Before installation of USB Converter application, Dot net framework (Version 3.5) should be installed on PC. User can install it from application software CD or from internet.
2. Ensure that USB to Serial converter software utility is running in system tray before connecting the device PC USB port otherwise USB converter will go in Default RS 232 mode.

Accessories:

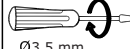

1. 28D33B0 - USB 2.0 Cable, Type A Male to B Male. 1 meter



2. 28E34B0 - Cable DB9 female to DB9 male.

3. 28NNN10 - CD for Application Software. Software - USB to Serial Converter Software available in CD. Driver Version - V6.6.1

TERMINAL DETAILS:

 Ø3.5 mm	0.54 N.m (5 Lb.in) Terminal screw - M2.6
	1 x 0.2...3.3 mm ² Solid Wire
AWG	1 x 24 to 12