USB to RS232 / RS485 / RS422 Converter

- Compatible with USB 2.0
- Input : USB 2.0 Protocol
- Output : RS232 on DB9 Male connector compatible to PC RS485/RS422 on terminal block.
- Communication Speed : 300bps to 230Kbps.
- Auto direction control for RS485-2W data transmission.
- Cable: USB 2.0 type A to type B cable.

- Galvanic Isolation of 1.5kV
- RS232/RS485 line protection: +/- 15kV ESD.
- LED Indication for Transmit Receive signals.
- Input power from USB port, no external power required.
- 2M enclosure with DIN Rail mounting.
- Virtual COM port USB Drivers provided for Win XP, Vista, Win7, Win8

Ordering Information

Cat. No.	Description
28A11A0	USB to RS232 / RS485 / RS422 Converter
28D33B0	Accessory for Converter 28A11A0, USB 2.0 Cable, Type A Male to B Male
28NNN10	Accessory for Converter 28A11A0, Software CD for Win XP, Vista, Win7, Win8

USB to RS232 / RS485 / RS422 Converter

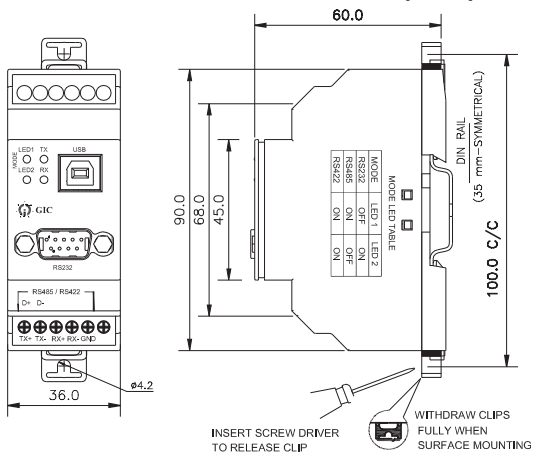| Cat. No.	28A11A0
Parameters	
USB	
Version	USB Specification 2.0 compliant
Speed	12 Mbps
Isolated Serial Interface	
RS232	TX, RX,GND
RS485	D+, D-, GND
RS422	TX+, TX-, RX+, RX-, GND
Auto direction control for RS485-2W	
Serial line Protection	Internal 15kV ESD protection
Isolation	1500 V Galvanic Isolation
Connector	RS232 - D Type 9 Pin Male Compatible with PC, RS485, RS422- Screw Terminals
LED Indication	TX, RX, Communication Mode Indication.
Power Requirements	USB BUS Powered
Operating Temperature	0° C To + 60° C
Storage Temperature	-20° C To + 70° C
Humidity	5% (Rh) to 95% (Rh)
Enclosure	Flame Retardant UL 94-V0
Dimension (W x H x D) (in mm)	36 X 90 X 52.3
Weight (unpacked) Approx.	100 g
Mounting	Base / DIN rail
Degree of Protection	IP 20 for Terminals, IP 40 for Enclosure
Certification	CE, RoHS Compliant
Function and Application	This converter allows serial devices on RS232/RS485/RS422 to systems using USB interface. It has galvanic isolation of 1500V between USB and Serial ports. It drives power from USB connector and does not need any power adapter.

EMI / EMC

Harmonic Current Emissions	IEC 61000-3-2
ESD	IEC 61000-4-2
Radiated Susceptibility	IEC 61000-4-3
Electrical Fast Transients	IEC 61000-4-4
Surges	IEC 61000-4-5
Conducted Susceptibility	IEC 61000-4-6
Conducted Emission	CISPR 14-1
Radiated Emission	CISPR 14-1

Environmental

Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6
Repetitive Shock	IEC 60068-2-27
Non-Repetitive Shock	IEC 60068-2-27

MOUNTING DIMENSIONS (mm)

RS232 to RS485 / RS 422 Converter

- Isolated RS485/RS422 on terminal block.
- RS232 with DB9 Female connector
- Auto direction control for RS485-2W transmission.
- Galvanic Isolation of 1500V for RS485/RS422.
- Supports Baud rate up to 230Kbps.
- Internal 15 kV ESD protection both
  RS232 and RS485/RS422.

- LED Indication for Transmit,
  Receive signal communication traffic.
- Input power supply range 9-6V DC to 26.4 VDC
- 2M enclosure with DIN Rail mounting.

Ordering Information

Cat. No.	Description
28B21A0	RS 232 to RS485/RS422 CONVERTER
28E34B0	Accessory for Converter 28B21A0, Cable, DB9 Female to DB9 Male

RS232 to RS485 / RS 422 Converter

Cat. No.	28B21A0
Parameters	
RS232 Port	
Connector	D type 9 pin Female
Serial line protection	Internal 15 kV ESD
Isolated RS485/RS422 Port	
No. of Ports	1
RS422	TX+, TX-, RX+, RX
RS485	D+, D-
Serial line Protection	15kV ESD
Serial Communication Parameter	
Isolation	1500 V Galvanic
Parity	None, Even, Odd, Space, Mark
Data Bits	5,6,7,8
Stop Bits	1,1,5,2
Flow Control	None, XON/XOFF,
Speed	300 bps to 230 Kbps
LED Indication	TX, RX LED indication
Input Supply Voltage	9.4 - 26.4 VDC
Power Consumption	1W
Operating Temperature	0° C to + 60° C
Storage Temperature	-25° C to + 70° C
Humidity	95% (Rh)
Enclosure	Flame Retardant UL 94-V0
Dimension (W x H x D) (in mm)	36 X 90 X 52.3
Weight (unpacked) Approx.	100 g
Mounting	Base / DIN rail
Degree of Protection	IP 20 for Terminals, IP 40 for Enclosure
Certification	CE RoHS Compliant
Function and Application	This converter allows to interface any device using RS232 serial link to RS485/RS422 link. The RS485 specification allows to network up to 32 Notes on the same lines, at speeds up to 10 Mbps to distances of 4,000 feet (1200 meters). RS485/RS422 links are much used in industrial process control where reliability is important.

EMI / EMC

Harmonic Current Emissions	IEC 61000-3-2
ESD	IEC 61000-4-2
Radiated Susceptibility	IEC 61000-4-3
Electrical Fast Transients	IEC 61000-4-4
Surges	IEC 61000-4-5
Conducted Susceptibility	IEC 61000-4-6
Voltage Dips & Interruptions (DC)	IEC 61000-4-29
Conducted Emission	CISPR 14-1
Radiated Emission	CISPR 14-1

Environmental

Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6
Repetitive Shock	IEC 60068-2-27
Non-Repetitive Shock	IEC 60068-2-27

MOUNTING DIMENSIONS (mm)