

INTERFACE CONVERTERS

USB to RS232 / RS485 / RS422 Converter

RS232 to RS485 / RS422 Converter

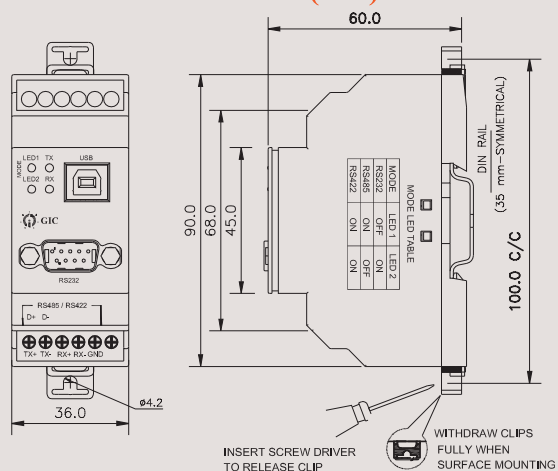
USB to RS232 / RS485 / RS422 Converter

- 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



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- Terminals	
LED Indication	TX, RX, Communication Mode Indication.	
Power Requirements	USB BUS Powered	
Operating Temperature	-20° C To + 70° 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)	120 g	
Mounting	Base / DIN rail	
Degree of Protection	IP 20 for Terminals, IP 40 for Enclosure	
Certification		
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	Ed. 3.0 (2005-11) 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 III
Electrical Fast Transients	IEC 61000-4-4	Ed. 2.0 (2004-07) Level I
Surges	IEC 61000-4-5	Ed. 2.0 (2005-11) Level I
Conducted Susceptibility	IEC 61000-4-6	Ed. 2.2 (2006-05) Level II
Conducted Emission	CISPR 14-1	Ed. 5.0 (2005-11) Class A
Radiated Emission	CISPR 14-1	Ed. 5.0 (2005-11) Class A
Environmental		
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) 5g
Repetitive Shock	IEC 60068-2-27	Ed. 4.0 (2008-02) 40g, 6ms
Non-Repetitive Shock	IEC 60068-2-27	Ed. 4.0 (2008-02) 30g, 15ms

MOUNTING DIMENSIONS (mm)



ORDERING INFORMATION

Cat. No.	Description
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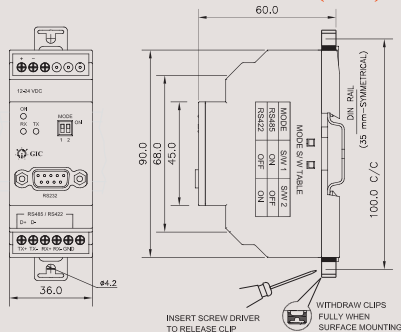
RS232 to RS485 / RS 422 Converter

- 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 250Kbps.
- Internal 15 kV ESD protection both RS232 and RS485/RS422.
- LED Indication for Transmit, Receive signal communication traffic.
- Input power supply range 9-35V DC.
- 2M enclosure with DIN Rail mounting.



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/Kbps to 250 bps/Kbps	
LED Indication	TX, RX LED indication	
Input Supply Voltage	9- 35VDC	
Power Consumption	2W	
Operating Temperature	-20° C To + 70° 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)	100 g	
Mounting	Base / DIN rail	
Degree of Protection	IP 20 for Terminals, IP 40 for Enclosure	
Certification		
Function and Application	<p>This converter allows to interface any device using RS232 serial link to RS485/RS422 link. The RS485 specification allows to network up to 32 stations 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.</p>	
EMI / EMC		
Harmonic Current Emissions	IEC 61000-3-2	Ed. 3.0 (2005-11) Class A
ESD	IEC 61000-4-2	Ed. 1.2 (2001-04) Level IV
Radiated Susceptibility	IEC 61000-4-3	Ed. 3.0 (2006-02) Level III
Electrical Fast Transients	IEC 61000-4-4	Ed. 2.0 (2004-07) Level III
Surges	IEC 61000-4-5	Ed. 2.0 (2005-11) Level III
Conducted Susceptibility	IEC 61000-4-6	Ed. 2.2 (2006-05) Level III
Voltage Dips & Interruptions (DC)	IEC 61000-4-29	Ed. 2.0 (2004-03) All 7 Levels
Conducted Emission	CISPR 14-1	Ed. 5.0 (2005-11) Class A
Radiated Emission	CISPR 14-1	Ed. 5.0 (2005-11) Class A
Environmental		
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) 5g
Repetitive Shock	IEC 60068-2-27	Ed. 4.0 (2008-02) 40g, 6ms
Non-Repetitive Shock	IEC 60068-2-27	Ed. 4.0 (2008-02) 30g, 15ms

MOUNTING DIMENSIONS (mm)



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