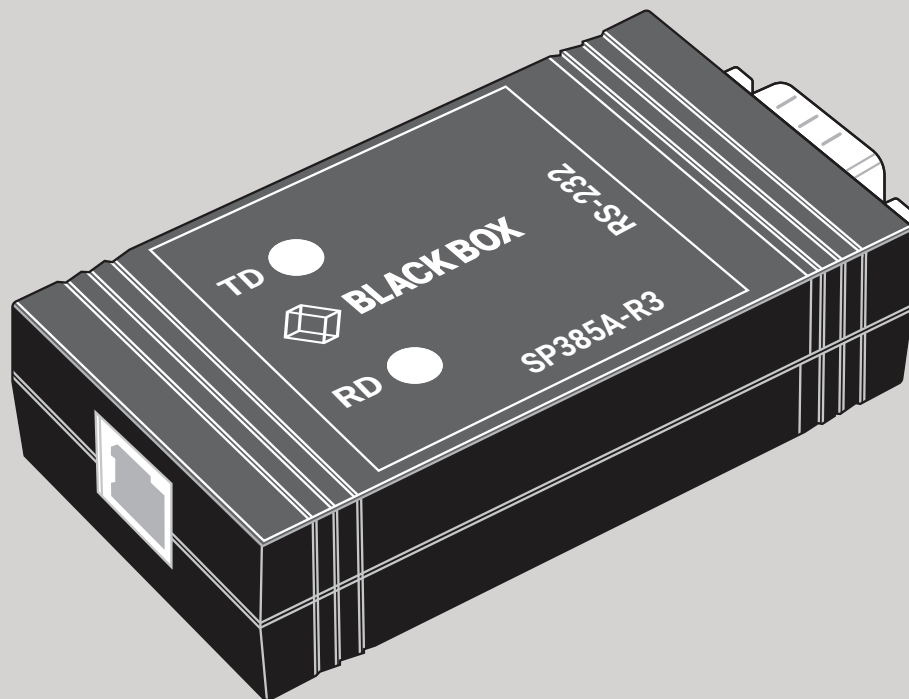


DATA SHEET

SP385A-R3, SP390A-R3

USB TO RS-232 OR RS-422/485 CONVERTER

24/7 TECHNICAL SUPPORT AT 877.877.2269 OR VISIT BLACKBOX.COM



OVERVIEW

USB TO RS-232 OR RS-422/485 OPTO-ISOLATED CONVERTER DATA SHEET

INTRODUCTION

Use this compact, isolated USB to RS-232 or RS-422/485 converter to add an RS-232 or RS-422/485 port to your USB-only PC. Built to rugged specifications with 2 or 15 kilovolts of isolation, it protects your PC from hazardous ground loops. It's ideal for use in instrumentation and laboratory environments.

One USB port is required for each installed device. The port can be native to the PC or it can be a USB port from an installed USB hub to the PC. The USB port supports full speed (12 Mbps) USB 2.0.

NOTE: The devices work with USB 1.1 or 2.0 ports, but have a maximum USB data rate of 12 Mbps.

The RS-232 port is a DB9 male connector wired as a DTE with full hardware handshake support. It handles RS-232 data rates up to 460.8 kbps.

The RS-422/485 port is a 5-pin pluggable terminal block that also handles RS-422/485 data rates up to 460.8 kbps.

FEATURES

- SP385A-R3 PROVIDES 2-KV ISOLATION
- SP390A-R3 PROVIDES 15-KV SURGE PROTECTION
- PROTECTS AGAINST ESD (4 KV CONTACT, 8 KV AIR)
- FEATURES A COMPACT IN-LINE CASE
- COMPATIBLE WITH USB 2.0 FULL-SPEED (12 MBPS) DEVICES
- SUPPORTS RS-232 OR RS-422/485 DATA RATES UP TO 460.8 KBPS
- POWERED BY THE USB BUS, SO NO POWER SUPPLY IS NEEDED

COMPARISON CHART

SPECIFICATION COMPARISON CHART		
	SP385A-R3	SP390A-R3
COMPATIBILITY	USB 1.0 and 2.0 (full-speed)	USB 1.0 and 2.0 (full-speed)
ISOLATION	Serial port: 2 kV	Serial port: 15 kV
MTBF	247,713 hours	2,267,777 hours
OPERATING SYSTEM	Windows 2000, XP (32/64 bit), Vista (32/64 bit), 7 (32/64 bit), 8 (32/64 bit), 10 (32/64 bit), 2003 & 2008 Server (32/64 bit)	Windows 2000, XP (32/64 bit), Vista (32/64 bit), 7 (32/64 bit), 8 (32/64 bit), 10 (32/64 bit), 2003 & 2008 Server (32/64 bit)
SPEED	Serial port data rate: 460.8 kbps; USB port speed: 12 Mbps (full)	Serial port data rate: 460.8 kbps; USB port speed: 12 Mbps (full)
CONNECTORS	(1) DB9 male, (1) USB Type B	(1) 5-pin pluggable terminal block, (1) USB Type B
TEMPERATURE	Operating: 32 to 158° F (0 to 70° C); Storage: -40 to +185° F (-40 to +85° C)	Operating: 32 to 158° F (0 to 70° C); Storage: -40 to +185° F (-40 to +85° C)
HUMIDITY	Operating: 0 to 95%, non-condensing	Operating: 0 to 95%, non-condensing
POWER	Source: USB bus powered; Consumption: Low-power device (less than 100 mA)	Source: USB bus powered; Consumption: Low-power device (less than 100 mA)
DIMENSIONS	1.7"H x 3"W x 0.9"D (4.3 x 7.7 x 2.3 cm)	1.7"H x 3.5"W x 0.8"D (4.3 x 8.9 x 2.1 cm)
WEIGHT	6.4 oz. (0.18 kg)	6.4 oz. (0.18 kg)



SPECIFICATIONS

USB TO RS-232 OPTO-ISOLATED CONVERTER (SP385A-R3)



WHAT'S INCLUDED WITH THE SP385A-R3

- USB TO RS-232 OPTO-ISOLATED CONVERTER
- 3.2-FT (1-M) USB CABLE

USB TO RS-232 OPTO-ISOLATED CONVERTER (SP385A-R3)	
COMPATIBILITY	USB 1.0 and 2.0 (full-speed)
ISOLATION	Serial port: 2 kV
MTBF	247,713 hours
OPERATING SYSTEM	Windows 2000, XP (32/64 bit), Vista (32/64 bit), 7 (32/64 bit), 8 (32/64 bit), 10 (32/64 bit), 2003 & 2008 Server (32/64 bit)
SPEED	Serial port data rate: 460.8 kbps; USB port speed: 12 Mbps (full)
CONNECTORS	(1) DB9 male, (1) USB Type B
TEMPERATURE	Operating: 32 to 158° F (0 to 70° C); Storage: -40 to +185° F (-40 to +85° C)
HUMIDITY	Operating: 0 to 95%, non-condensing
POWER	Source: USB bus powered; Consumption: Low-power device (less than 100 mA)
DIMENSIONS	1.7"H x 3"W x 0.9"D (4.3 x 7.7 x 2.3 cm)
WEIGHT	6.4 oz. (0.18 kg)

SPECIFICATIONS

USB TO RS-422/485 OPTO-ISOLATED CONVERTER (SP390A-R3)



SP390A-R3

WHAT'S INCLUDED WITH THE SP390A-R3

- USB TO RS-422/485 OPTO-ISOLATED CONVERTER
- 3.2-FT (1-M) USB CABLE

USB TO RS-422/485 OPTO-ISOLATED CONVERTER (SP390A-R3)	
COMPATIBILITY	USB 1.0 and 2.0 (full-speed)
ISOLATION	Serial port: 15 kV
MTBF	2,267,777 hours
OPERATING SYSTEM	Windows 2000, XP (32/64 bit), Vista (32/64 bit), 7 (32/64 bit), 8 (32/64 bit), 10 (32/64 bit), 2003 & 2008 Server (32/64 bit)
SPEED	Serial port data rate: 460.8 kbps; USB port speed: 12 Mbps (full)
CONNECTORS	(1) 5-pin pluggable terminal block, (1) USB Type B
TEMPERATURE	Operating: 32 to 158° F (0 to 70° C); Storage: -40 to +185° F (-40 to +85° C)
HUMIDITY	Operating: 0 to 95%, non-condensing
POWER	Source: USB bus powered; Consumption: Low-power device (less than 100 mA)
DIMENSIONS	1.7"H x 3.5"W x 0.8"D (4.3 x 8.9 x 2.1 cm)
WEIGHT	6.4 oz. (0.18 kg)



