

Entry-level RS-232 to RS-422/485 converters



- Features and Benefits
- Automatic Data Direction Control (ADDC) RS-485 data control
 - Automatic baudrate detection
 - RS-422 hardware flow control: CTS, RTS signals
 - LED indicators for power and signal status
 - RS-485 multidrop operation, up to 32 nodes
 - 2 kV isolation protection (A53)
 - Built-in 120-ohm termination resistors

Certifications



Introduction

The A52 and A53 are general RS-232 to RS-422/485 converters designed for users who need to extend RS-232 transmission distance and increase networking capability.

Specifications

Serial Interface	
Connector	10-pin RJ45
Flow Control	RTS/CTS
Isolation	A53 Series: 2 kV
No. of Ports	2
RS-485 Data Direction Control	ADDC (automatic data direction control)
Serial Standards	RS-232 RS-422 RS-485
Serial Signals	
RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422	Tx+, Tx-, Rx+, Rx-, RTS+, RTS-, CTS+, CTS-, GND
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND
RS-485-2w	Data+, Data-, GND
Power Parameters	
Input Current	A52 Series: 170 mA @ 9 VDC A53 Series: 195 mA @ 9 VDC
Input Voltage	9 to 30 VDC
No. of Power Inputs	1

Overload Current Protection	Supported
Power Consumption	A52 Series: 170 mA @ 9 VDC A53 Series: 195 mA @ 9 VDC
Source of Input Power	Power input jack

Physical Characteristics

Housing	Plastic
IP Rating	IP30
Dimensions	90 x 60 x 21 mm (3.54 x 2.36 x 0.83 in)
Weight	85 g (0.19 lb)
Installation	Desktop

Environmental Limits

Operating Temperature	0 to 55°C (32 to 131°F)
Storage Temperature (package included)	-20 to 75°C (-4 to 167°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

EMC	EN 55032/35
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 1 kV; Signal: 0.5 kV IEC 61000-4-5 Surge: Power: 1 kV IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-8 PFMF
Environmental Testing	IEC 60068-2-1 IEC 60068-2-14 IEC 60068-2-2 IEC 60068-2-3
Vibration	IEC 60068-2-6

MTBF

Time	1,870,854 hrs
Standards	Telcordia (Bellcore), GB

Warranty

Warranty Period	5 years
Details	See www.moxa.com/warranty

Package Contents

Device	1 x Transio A52/A53 Series converter
Cable	1 x 10-pin RJ45 to DB9F (-DB9F models) 1 x 10-pin RJ45 to DB25F (-DB25F models)
Documentation	1 x quick installation guide 1 x warranty card

Ordering Information

Model Name	Serial Isolation	Power Adapter Included	Serial Cable
A52-DB9F w/o Adapter	–	–	DB9F
A52-DB25F w/o Adapter	–	–	DB25F
A52-DB9F w/ Adapter	–	✓	DB9F
A52-DB25F w/ Adapter	–	✓	DB25F
A53-DB9F w/o Adapter	✓	–	DB9F
A53-DB25F w/o Adapter	✓	–	DB25F
A53-DB9F w/ Adapter	✓	✓	DB9F
A53-DB25F w/ Adapter	✓	✓	DB25F

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