

Datasheet

ADA-13040

ETHERNET to RS485/RS422 converter



APPLICATION

ADA-13040 converter is used for data transmission between devices equipped with RS485/RS422interface via LAN/WAN network. In the ETHERNET network converter can operate in Virtual Serial Port mode, TCP serial bridge mode, UDP serial bridge mode. Converter can use protocols: TCP, UDP, DHCP, SNMP, SSL/TLS, Telnet, Rlogin, LPD, HTTP/HTTPS, SMTP, ICMP, IGMP, ARP. The converter has implemented a web server what allow you to configure and manage it via internet browser. ADA-13040 support the asynchronous transmission data with baud rate 230,4 kbps via RS485/RS422 interface and use RX+, RX-, TX+(A), TX-(B) signals.

It is possible to connect 32 devices operating in half duplex mode to RS485 network constructed on ADA-13040.

The converter is adapted to supply an external voltage source from 10V to 30V and power 3W.

ADA-13040 has implemented protection against opposite polarization of power supply and over-voltage protection on RS485/RS422 network. Converter has galvanic isolation between ETHERNET and RS485/RS422 interface and power supply and optoisolation in signal channel between ETHERNET and RS485/RS422 interface

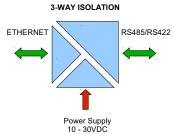
TECHNICAL DATA

Transmission Parameters			
Interface	ETHERNET	RS485/RS422	
Connector	RJ45	Screw terminal block - max. Ø 2,5mm²	
Max. Line length	LAN up to 150 m	1200 m	
Max. number of connected device	Depend on addressing type in network	32	

Transmission line	4-pair twisted cable, UTP 4x2x0,5 (24AWG), shield inside large interferences STP 4x2x0,5 (24AWG)).	2-pair twisted cable, UTP Nx2x0,5 (24AWG), shield inside large interferences STP Nx2x0,5(24AWG).	
Standards	IEEE 802.3,	EIA-485, CCITT V.11	
Baud rate	10/100 Mbit/s	Up to 230,4 kbps	
Transmission type	Asynchronism half duplex or full duplex,		
Optical Signalization	PWD – green LED, power supply, RX - red LED, data receiving on RS485/RS422, TX - yellow LED, data transmission via RS485/RS422.		
Electrical Parameters			
Power requirements	10 - <u>24</u> – 30 V DC		
Power Cable	Recommended length of power cable – up to 3m		
Power	3W		
Protection from reverse power polarization	YES		
Galvanic Isolation	1kV or 3kV, 2-WAY or 3-WAY		
Optoisolation	~3kV= in signal channel between Ethernet and RS485/RS422 interfaces		
Electromagnetic compatibility	Resistance to disruptions PN-EN 55024. Emission of disruptions PN-EN 55022.		
Safety requiring	According to the PN-EN60950 norm.		
Environment	Commercial and light industrial.		
Environmental Parameters			
Operating temperature	-30 ÷ 60°C		
Humidity	5 ÷ 95% - non-condensing		
Storage temperature	-40 ÷ 70°C		
Casing			
Dimensions (W x D x H)	53mm x 90mm x 62 mm		
Material	PC/ABS		
Degree of casing protection	IP40		
Degree of terminal protection	IP20		
Weight	0,10 kg		
According to standards	DIN EN50022, DIN EN43880		
Location during work	Free		
Mounting method	On the rail compliant with DIN35 / TS35 standard.		

GALVANIC ISOLATION

Power Supply 10 - 30VDC



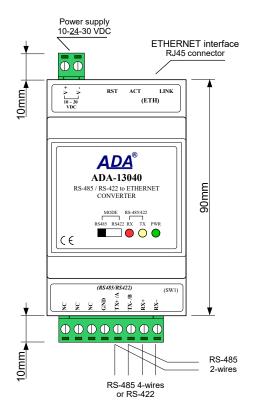
CEL-MAR sp.j.

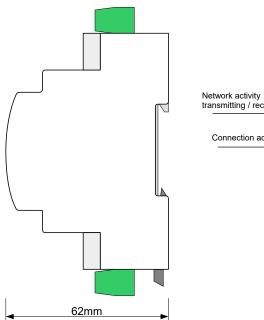
Production Electronics Facility Sciegiennego 219C str. 25-116 Kielce, POLAND

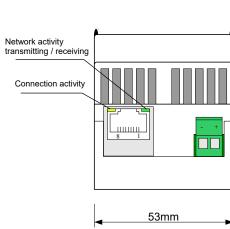
www.cel-mar.pl/en



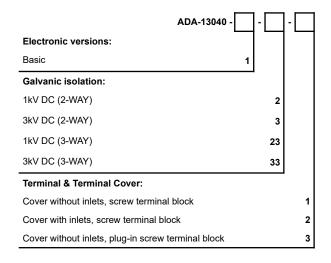
DIMENSIONS AND CONNECTION







VERSIONS



Order example:

Product Symbol: **ADA-13040-1-23-3**

- 1 basic version of electronic,
- 23 3-way galvanic isolation 1kV=,
- 3 cover without inlets, plug-in screw terminal block,