Datasheet

ADA-13040MG

ETHERNET to RS485/RS422 converter with MODBUS GATEWAY

APPLICATION

ADA-13040MG converter is used for data transmission between devices equipped with RS485/ RS422 interface via LAN/WAN network. In the ETHERNET network converter can operate in Virtual Serial Port mode, TCP serial bridge mode, UDP serial bridge mode, TCP sockets, UDP sockets and MODBUS Data Gateway . The MODBUS Data Gateway converts MODBUS-RTU master/slave and MODBUS-ASCII master/slave protocol to MODBUS-TCP and inversely. This allows for integrate MODBUS-RTU/ASCII with MODBUS-TCP devices within one network. Converter uses protocols: TCP, UDP, DHCP, SNMP, SSL/TLS, Telnet, Rlogin, LPD, HTTP/HTTPS, SMTP, ICMP, IGMP, ARP. It has a built-in WWW web server what allow you to configure and manage it via internet browser. The ADA-13040MG supports the 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 the ADA-13040MG.

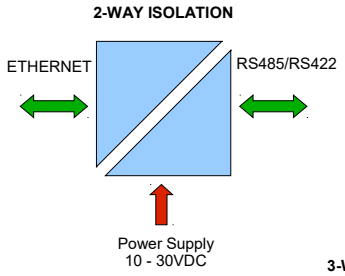
The Converter is adapted to supply an external voltage source fron 10V to 30V and power 3W. ADA-13040MG has implemented protection against opposite polarization of power supply and over-voltage protection on RS485/RS422 network. Converter has galvanic isolation between ETHERNET and RS485/RS422 interface and power supply and optoisolation in signal channel between ETHERNET and RS485/RS422 interface.

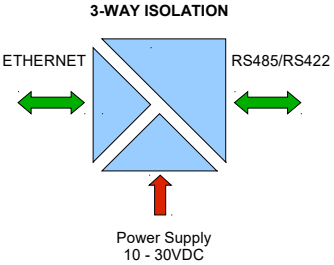
We provide with converter the drivers which installed in the operating system, will create an additional COM port. This port is the next free number eg COM3, can be used like a standard COM port. However, it is not the real port existing in a computer, but only a virtual, created by the system, therefore some programs running under DOS and links to this COM port may not function properly.

TECHNICAL DATA

Transmission Parameters		
Interface	**ETHERNET**	**RS485/RS422**
Connector	RJ45	Screw terminal block - max. Ø 2,5mm^2
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 - 24 – 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





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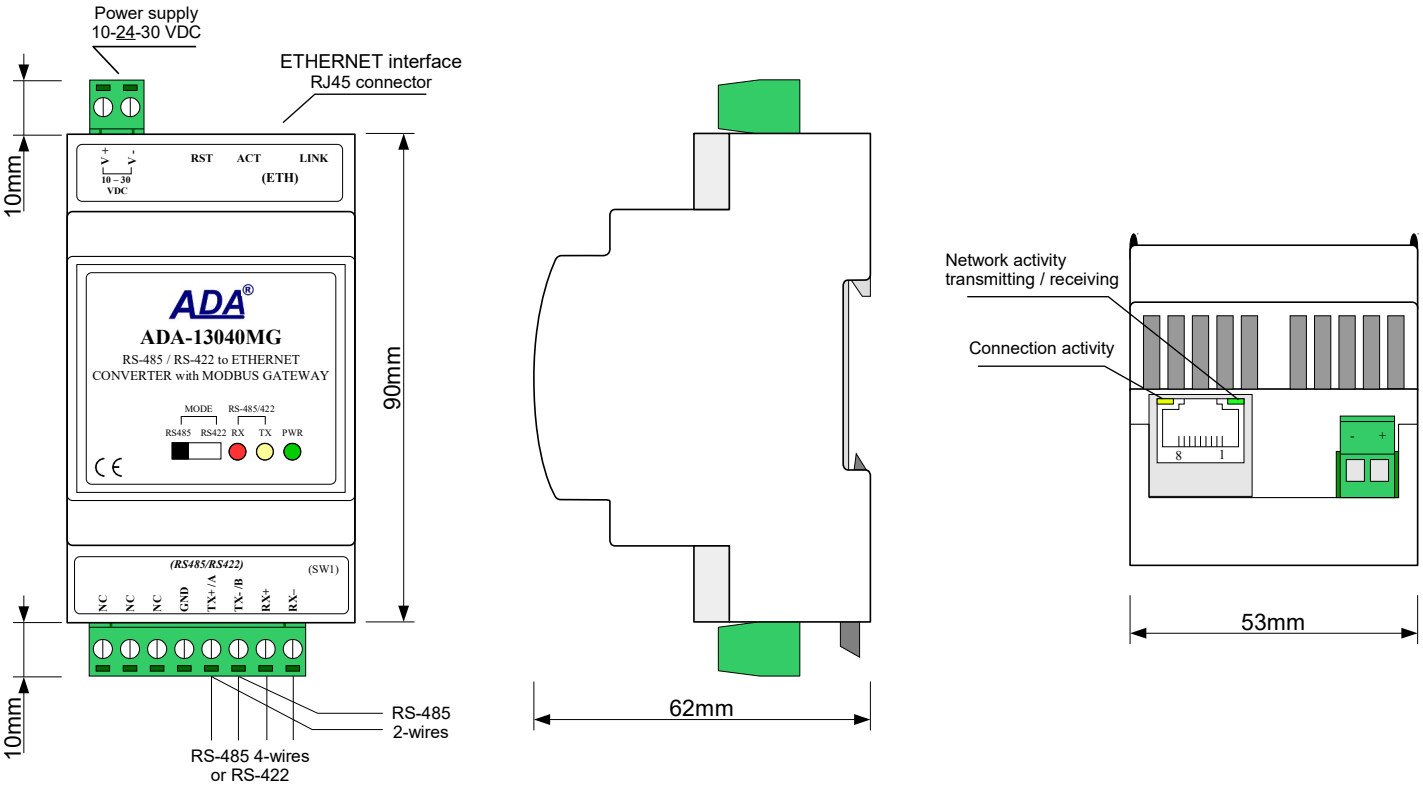
DIMENSIONS AND CONNECTION



VERSIONS

ADA-13040MG - [ ] - [ ] - [ ]

Electronic versions:	
Basic	**1**
Galvanic isolation:	
1kV DC (2-WAY)	**2**
3kV DC (2-WAY)	**3**
1kV DC (3-WAY)	**23**
3kV DC (3-WAY)	**33**
Terminal & Terminal Cover:	
Cover without inlets, screw terminal block	**1**
Cover with inlets, screw terminal block	**2**
Cover without inlets, plug-in screw terminal block	**3**

Order example:

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

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

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