Datasheet

ADA-1010

Separator – Repeater RS-232

APPLICATION

ADA-1010 repeater separates RS232 port of PC from operating device and amplifies signal of RS232 standard for other 15m without interfere in byte format. It can be used to communicate with other distant device such as: PC, controller or cash register.
ADA-1010 does not require power supply from RS232 port, supports asynchronous data transitions rate up to 230,4 kbps.
ADA-1010 is equipped with one female DB-9F for RS232 (IN) connection and terminal block for RS232 (OUT) connection and power supply.
Connector DB-9F is made like DCE, it let connect repeater to PC using the extension cable RS232 (typical cable for modem connection) without crossing TX with RX, RTS with CTS, DTR with DSR. Separator uses signals: RX, TX, RTS, CTS, DTR, DSR and SG (signal ground). Other signal are not used.
Separator - repeater can be used as:

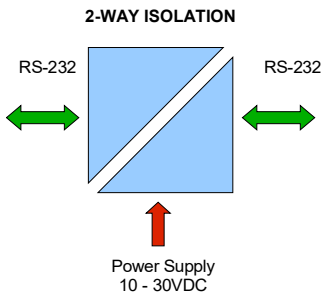
- Separator of RS232 PC port getting galvanic isolation for electronics PC from connected device,
- Repeater – using three sections of 9-wire shielded cable and two ADA-1010 separators You can connect two devices with RS232 interface together which are distance up to 45m (3 x 15m),
- Extender RS232 port using six pairs twisted cable and two ADA-1010 separators You can connect two devices with RS232 interface together which are distance up to 300m (3 x 15m).

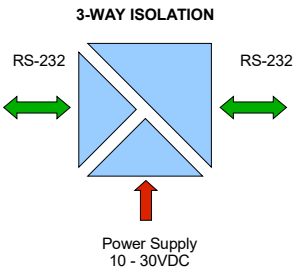
TECHNICAL DATA

Transmission Parameters		
Interface	**RS-232 IN**	**RS-232 OUT**
Connector	DSUB-9 Female	Screw terminal block - max. Ø 2,5mm2
Max. Line length	Up to 15m – connection using cable RS232 extender type, baud rate up to 230,4 kbps. Up to 300m - connection using multicore twisted cable, baud rate up to 56,0 kbps.	
Max. number of connected device	1	

Maximum baud rate	230,4 kbps
Transmission line	DB9F/DB9M multicore cable 9x0,34 shielded or 9-pair twisted cable, UTP 9x2x0,5 (24AWG) shield inside large interferences STP 9x2x0,5 (24AWG).
Transmission type	Asynchronous full duplex, half duplex.
Standards	EIA-232, CCITT V.24,
Optical Signalization	PWR– green LED power supply, RX- red LED data receiving through RS232(OUT), TX- yellow LED data transmission through RS232(OUT), RTS- yellow LED data transmission through RS232(OUT), CTS- red LED data receiving through RS232(OUT), DTR- yellow LED data transmission through RS232(OUT), DSR- red LED data receiving through RS232(OUT),
Electrical Parameters	
Power requirements	10 - 24 – 30 V DC
Power Cable	Recommended length of power cable – up to 3m
Power	<2W
Protection from reverse power polarization	YES
Galvanic Isolation	1kV or 3kV DC and 2-way or 3-way (between power circuit and signal line RS232 IN)
Optoisolation	3kV (between signal lines RS-232(IN) and RS-232 (OUT))
Electromagnetic compatibility	Resistance to disruptions according to the standard PN-EN 55024. Emission of disruptions according to the standard 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 standard	DINAS EN50022, DINAS EN43880
Location during work	Free
Mounting method	On a rail compliant with DIN35 / TS35 standard.

GALVANIC ISOLATION





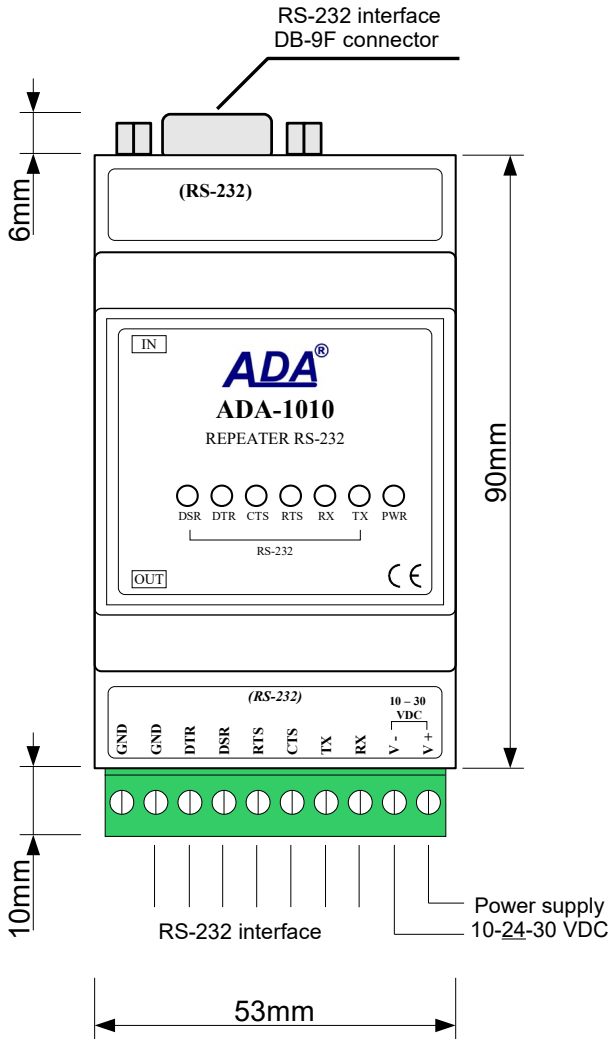
CEL-MAR sp.j.
Production Electronics Facility
Sciegiennego 219C str.
25-116 Kielce, POLAND

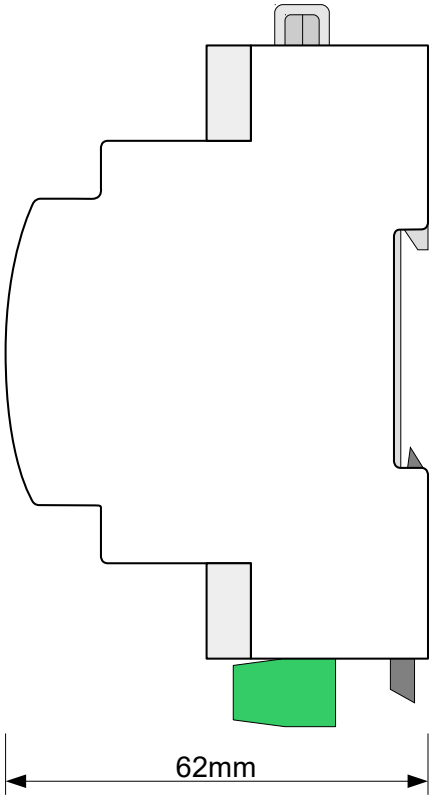
Office.....: office@cel-mar.pl
Sales department.....: sales@cel-mar.pl
Technical information....: support@cel-mar.pl

Tel.....: +48 41 362-12-46
Tel/fax.....: +48 41 361-07-70
Sales dep. GSM.....: +48 660-42-90-10
Technical dep.GSM.....: +48 604-097-864

www.cel-mar.pl/en

DIMENSIONS AND CONNECTION





VERSIONS

ADA-1010 - ☐ - ☐

Galvanic isolation:	
1kV=, 2-WAY	**2**
1kV=, 3-WAY	**22**
3kV=, 2-WAY	**3**
3kV=, 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-1010-23-3**

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

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