

Interface converter RS232 - **EASYBUS**

EBW1



General information:

The EBW1 is a bidirectional interface converter RS232 <-> **EASYBUS**, by means of which you can connect up to 14 **EASYBUS**-sensor modules to the serial interface of your PC.

Specification:

Supply voltage:	220-240V AC; 50/60Hz
Power consumption:	approx. 5W
Working temperature:	0 to 50°C
Storage temperature:	-20 to 70°C
Relative humidity:	0 to 80 % r.h. (non-condensing)
Dimensions:	70 x 112 x 45 mm (W x H x D; housing only)
EMC:	The units correspond to the essential protection ratings established in the Regulations of the Council for the Approximation of Legislation for the member countries regarding electromagnetic compatibility (89/336/EWG). Tested and approved pursuant to EN50081-1 and EN50082-1 for unlimited use in residential and commercial areas.

EASYBUS

Connection:	2-pin screw-type/plug in terminal: PHOENIX: MC1.5/2-ST-3.5 max. terminal range: 1.5mm ²
Connecting cable:	2-pin, twisted (recommended)
Bus load:	max. 14 EASYBUS standard loads
Cable length:	max. 200 meters
Baud rate:	max. 4800 Baud
Short circuit strength:	permanently short circuit proof
Insulation voltage:	500 V DC

RS232:

Connection:	9-pin Sub-D-socket, (to be connected to PC via cable 1:1)
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Pin assignment:

2	—	RxD
3	—	TxD
4	┌	GND
5	└	
6	└	
7	┌	
8	└	



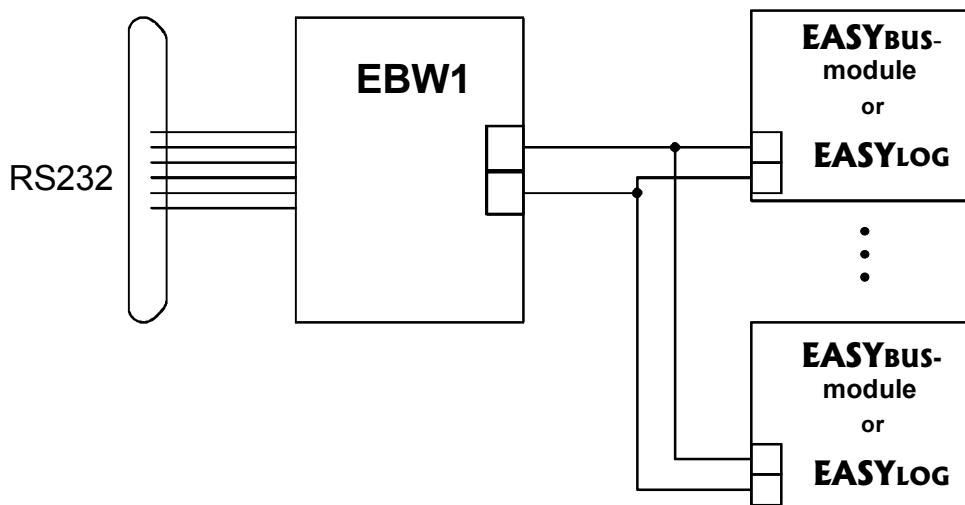
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Wiring diagram:

The EBW1 can be used to connect up to 14 **EASYbus**-sensor modules to the RS232-interface of your PC. The EBW1 supplies current to the **EASYbus**-sensor modules. The 2-pin parallel connection is not polarized.



Installation and commissioning:

Connect **EASYbus**-sensor modules (please not the connection information!) to interface converter according to the wiring diagram via a 2-pin connection cable (twisted line recommended).

Connect EBW1 to a supply voltage of 220 - 240 VAC.

Then connect the interface converter to the RS232-interface of your personal computer.

Unless the interface converter EBW1 is properly handled it may be damaged. This may also result in the damage of other devices connected.

In such cases we cannot assume any warranty !

The manufacturer will not assume any warranty for damages to other devices resulting from the use of the EBW1.

Connection information:

The interface-converter can supply the specified numbers of **EASYbus** standard loads (max. 14 pieces) .



Please note that some *EASYbus*-modules have a higher bus load as the standard load!
Please notice the corresponding specification in the module manual.

Bus loads of some **EASYbus** modules:

EASYLOG -family:	2	EASYbus standard loads
EBN :	2	EASYbus standard loads
EBHT, EBT, EBH :	1.5	EASYbus standard loads
GIA20EB, GIR2002 :	1	EASYbus standard load

When connecting the modules keep in mind that the sum of all bus loads of the modules must not exceed the maximal allowed number.

Worked sample:

1) Connection of 4 **EASYLOG**, 2 EBHT and 3 GIA20EB:

$$4 * 2 + 2 * 1.5 + 3 * 1 = 8 + 3 + 2 = 14 \text{ standard loads (9 devices) } \Rightarrow \text{connection is possible}$$

2) Connection of 6 **EASYLOG**, 2 EBN:

$$6 * 2 + 2 * 2 = 12 + 4 = \underline{16} \text{ standard loads (8 devices) } \Rightarrow \underline{\text{EBW1 are overloaded!}}$$

3) Connection of 14 GIA20EB or GIR2002:

$$14 * 1 = 14 \text{ standard loads (14 devices) } \Rightarrow \text{connection is possible}$$



Safety Requirements::

This device has been designed and tested in accordance with the safety regulations for electronic devices. However, its trouble-free operation and reliability cannot be guaranteed unless the standard safety measures and special safety advises given in this manual will be adhered to when using the device.

1. Trouble-free operation and reliability of the device can only be guaranteed if the device is not subjected to any other climatic conditions than those stated under "Specification".
2. Make it a rule to always disconnect voltage source and device before opening it up. The entire device and its connection have to be fingerproof after installation.
3. Standard regulations for operation and safety for electrical light and heavy current equipment have to be observed, with particular attention having to be paid to national regulations (e.g. VDE0100).
4. If device is to be connected to other devices (e.g. via serial interface) the circuitry has to be designed most carefully. Internal connection in third party devices (e.g. connection GND and earth) may result in not-permissible voltages impairing or destroying the device or another device connected.
5. If there is a risk whatsoever involved in running it, the device has to be switched off immediately and to be marked accordingly to avoid re-starting.

Operator safety may be a risk if:

- there is visible damage to the device
- the device is not working as specified
- the device has been stored under unsuitable

In case of doubt, please return device to manufacturer for repair or maintenance.

6. **Attention:** Do NOT use this product as safety or emergency stopping device, or in any other application where failure of the product could result in personal injury or material damage.
Failure to comply with these instructions could result in death or serious injury and material damage.

Disposal instruction:

The device must not be disposed in the unsorted municipal waste! Send the device directly to us (sufficiently stamped), if it should be disposed. We will dispose the device appropriate and environmentally sound.

