

APPLICATION NOTE: CME8000-BUS-AN001
Basic rules to read out data

1. Introduction

The CME8000-BUS module is available in several versions with different interfaces: serial bus (half duplex), RS232 (full duplex), RS485-half duplex and RS485-full duplex. The received data can be given out via these interfaces to a customised application or PC and evaluated.

2. Special rules for receiving and reading out data

If the CME8000 BUS is connected to any application, data should only be requested from the CME8000-BUS module after reception is completed. In case of permanent read-out of data, interference may occur and cause mis-reception, due to the interface IC implemented in this module. The interface IC creates a high voltage level between -12 and +12V, which will lead to interference of the signal to be received. Generally, the sensitivity of the CME8000-BUS module is approximately 20 – 30µV/m. If data is read out permanently, it may drop to 200µV/m.

For the following modules, we **do not** recommend to read out data permanently during reception:

Interface	Communication	PCB with antenna	casing with edge connector	sealed casing (IP67) with 4m cat5 wire
RS232	full duplex	CME8000-BUS-LP-02	CME8000-BUS-GS-02	CME8000-BUS-GV-02
RS485	half duplex	CME8000-BUS-LP-03	--	CME8000-BUS-GV-03
RS485	full duplex	CME8000-BUS-LP-04	--	CME8000-BUS-GV-04

If reception is not active, data can be read out permanently and be used as a real time clock.

For the CME8000-BUS module with serial bus interface, this rule does not apply. Here, data can permanently be read out to the application, since there is no interface IC implemented in this module. For reading out data, it is necessary to use an external RS232 interface.

Interface	Communication	PCB with antenna	casing with edge connector	sealed casing (IP67) with 4m cat5 wire
serial bus	half duplex	CME8000-BUS-LP-01	CME8000-BUS-GS-01	CME8000-BUS-GV-01