

## GENERAL INFO

Serie EE29 can be configured via PC but have no calculation function and no data output.

### EE29 communication

- Stand Alone mode, serial interface (RS232: 9,6kBaud, halfduplex, no parity, 8 databits, 1 stopbit)

### EE31 communication

- Stand alone mode(EE31), network (EE31 with RS485) mode, serial interface (RS232,485: 9,6kBaud, halfduplex, no parity, 8 databits, 1 stopbit)

All transmitters are slaves and communication starts through Hostes = PC (Master).

Command System:

⇒ PC send a command (incl. parameter)

⇒ Transmitter carry out the command and return **<ACK>** (0x06) + requested datas, or **<NAK>** (0x15) + error code.

Transmitter communication via network address (2 Byte).

## COMMANDS

Structure for serial communication:

⇒ network address (2 Byte)

⇒ command (1 Byte)

⇒ data length (1 Byte)

⇒ datas (x Byte) (1. Byte = Byte for status)

⇒ CRC (1 Byte)

**CRC-structure: (address + command + length + datas1...datasN) MODULO 0x100.**

**NOTE: More-byte-values (int, float, ...) communication in INTEL format!**

Description of commands (from PC, Master) and answers (from transmitter, slave).

First Databyte = **[S]**

## ERROR CODE

Code	Description
0x00	No error
0xEC	No calibration datas
0xED	EEPROM defect
0xEE	No humidity sensor/probe (C<100pF)
0xEF	No humidity sensor/probe (C>600pF)
0xFA	No temperature sensor/probe (R<500)
0xFB	No temperature sensor/probe (R>1800)
0xFC	Parameter wrong/not valid
0xFD	Command not valid at the moment
0xFE	Command unknown
0xFF	CRC-error

## DATA OUTPUT

Command for data output.

### Command:

[A][B][L][D][C]

Feld	Wert	Byte	Beschreibung
[A]		2	Network address
[B]	0x67	1	Command ( <b>g</b> )
[L]		1	Number of databytes
[D]		1	Measuring value 1
:			
[D]		1	Measuring value n
[C]		1	CRC

### Answer:

[A][B][L][S][D][C]

Feld	Wert	Byte	Beschreibung
[A]		2	Network address
[B]	0x67	1	Command ( <b>g</b> )
[L]		1	Number of databytes
[S]		1	< <b>ACK</b> > or < <b>NAK</b> >
[D]		1	[S] = < <b>ACK</b> >: physical unit of measuring value ( <b>0</b> = metric; <b>1</b> = non metric) [S] = < <b>NAK</b> >: error code
[D]		4	[S] = < <b>ACK</b> >: Measuring value 1
:			[S] = < <b>ACK</b> >:
[D]		4	[S] = < <b>ACK</b> >: Measuring value n
[C]		1	CRC

Measuring values 0: temperature  
Measuring values 1: humidity  
Measuring values 2: water vapour partial pressure  
Measuring values 3: dew point temperature  
Measuring values 4: wet bulb temperature  
Measuring values 5: absolute humidity  
Measuring values 6: mixture ratio  
Measuring values 7: enthalpy  
Measuring values 8: frost point temperature