

QG65_ analog communication protocol v1.1

20130909

Scope:

This document describes the RS232 communication possibilities with the QG65/76 analog sensor for internal DIS-use (automated calibration, configurator software etc)

Hardware-interface:

Rx, Tx, Gnd, 12V. Sensor supports real RS232 levels ($\pm 12V$), but no CTS, only Rx & Tx

Uart settings: 38400,n,8,1

Baudrate: 38.400 baud
 Databits: 8
 Parity: No
 Stopbit: 1

RS232 commands

Poll principle only. Sensor is slave and only answers poll-questions

Parameternumber	Type	R/W	Name	Description
2000	S32	R	Process_value1	Measured angle X element (in 0.01°) Eg. -1010 = - 10,10°
2001	S32	R	Process_value2	Measured angle Y element
2002	S8	R	Process_value3	Measured temperature in whole degrees Celsius
2010	U16	R	Process_x_counts	X counts VTI element (0 ~ 2048)
2011	U16	R	Process_y_counts	Y counts VTI element (0 ~ 2048)

Example: (read the angle of the X-axis):

PC → QG65: r2000[CR]
 QG65 → PC: r2000 > -218[CR/LF]
 Answer is -218, so the angle of the X-axis is -2,18°.

Example with terminal application PuTTY

