

Torque Sensor Read Out Unit



- Compact readout box with display
- 1 torque sensor input, 0 .. 10 V
- 1 angle encoder input (A/B) or speed sensor input (A)
- 2x digital input
- 2x digital output
- USB interface, Windows software included
- SD card slot
- Temperature range from +5 °C to +50 °C

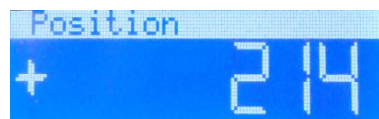
1. Short description

The **NCTE Read Out Unit** is a multifunctional readout unit dedicated for the NCTE torque sensors. One unit can be connected with one torque sensor. The unit will then supply the power to the sensor. The analog output (0..5 V or **0..10 V**) of the sensor and/or its angle encoder should be connected with the unit. Torque, angle or speed can be displayed. The measurement data can be stored on an inserted SD flash memory card or sent directly to a PC computer via USB interface in real time (Windows software included).

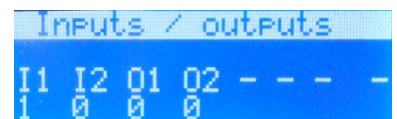
2. Screen examples



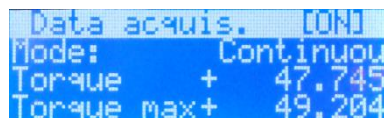
Torque



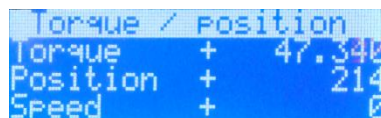
Position



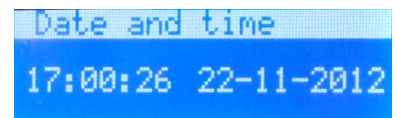
Digital Input / Output



Data acquisition



Torque and position



Date and time

2. Backside / Connections

2 pin power connector 15-30V
2 pin RS485 connector (n.c.)
USB Type B
SD card slot

4 pin digital output connector
4 pin digital input connector
8 pin sensor connector



3. Scope of delivery

Read out unit, 5x green connectors, USB cable 1,8 m, 4 GB SD card

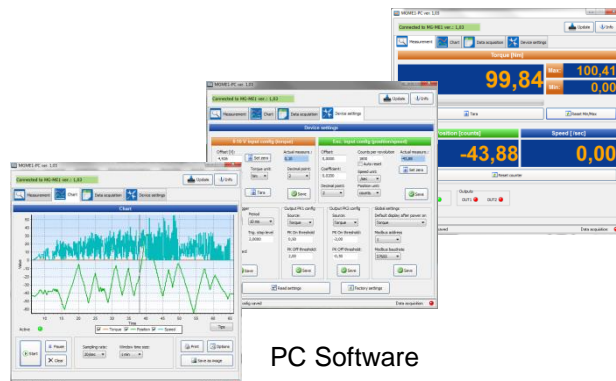
4. Technical Specifications

Power	Unit	Value
Power supply	V DC	15 .. 30 (max. 200 mA)
Inputs	Unit	Value
Torque input analog	V	0 .. 10
Torque input resistance	MΩ	1
Torque input analog resolution	mV	± 2.5 (12 bit)
Torque input analog accuracy	%	< ±0.05
Max. sampling rate (including oversampling)	Hz	100
Encoder input - incremental angle sensor (A/B) or speed sensor (A)	-	A / B (< 1 MHz) Low < 1 V, high 2..6 V DC
Digital inputs 2x	-	Low level: < 1 V High level: +5 .. +24 V
Outputs	Unit	Value
Relay outputs 2x	-	1 A / 125 V AC or 2 A / 30 V DC
Power for sensor	V DC	12 (max. 100 mA)
Data output	Unit	Value
Memory card slot	-	SD / SD HC
USB interface	-	2.0 HID
Acquisition interval	-	10 ms .. 1 h
LCD Display, blue-white	-	122 x 32 px
General	Unit	Value
Housing dimensions	mm	H 45 x W 92 x L 108 Front: H 49 x W 96
Operating temperature	°C	5 .. 50
Weight	g	330
IP class	-	IP40

5. Contact

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PC Software