

Torque Sensor Read Out Unit



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

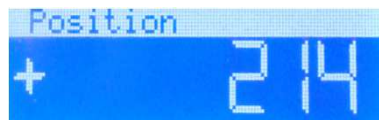
1. Short description

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).

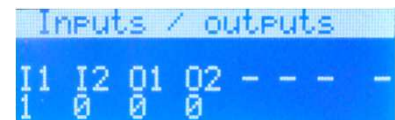
2. Screen examples



Torque



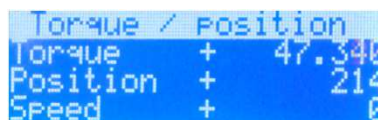
Position



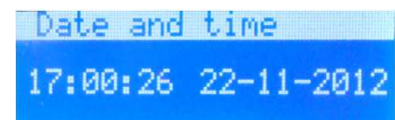
Digital Input / Output



Data acquisition



Torque and position



Date and time

2. Backside / Connections

2 pin power connector
2 pin RS485 connector
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

Torque Sensor Read Out Unit

4. Technical Specifications

| Power | Unit | Value |
|--------------------------------|------|--|
| Power supply | V DC | 15 .. 30 |
| 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 | Hz | 100 |
| Encoder input | - | 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 |
| 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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