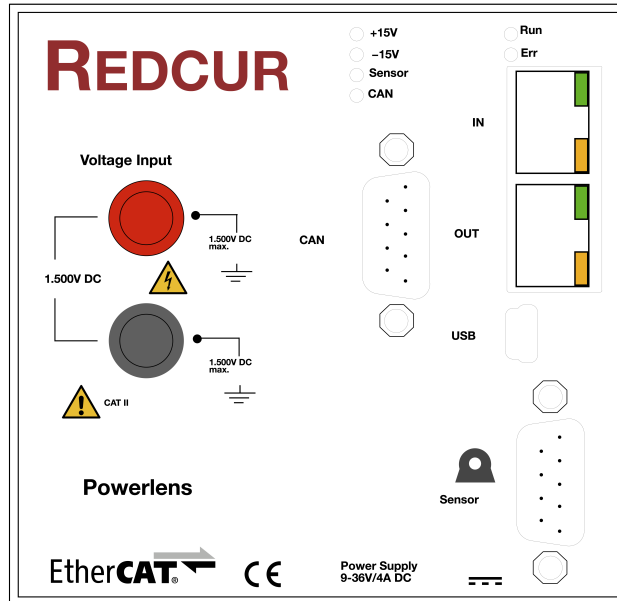


High Precision DC Instrument

over EtherCAT[®] and CAN bus



Features

- 24-Bit $\Delta\Sigma$ -ADCs with Clock-Sync Sampling of Current and Voltage
- Electric Charge - Counting ΔQ , Q^+ , Q^-
- Electric Energy - Counting ΔW , W^+ , W^-
- $I_{max} \pm 2.000$ A
- $U_{max} \pm 1.500$ V - Single Range
- Power Supply for Current Transducer
- EtherCAT[®] Interface
- CAN Bus Interface
- 5kV Isolation Rating
- Calibration Service (optional)
- Supports CT Series Current Transducers from SIGNALTEC/LEM[®]
- Transducer Overload Detection
- Power Supply 9–36V DC
- Voltage Accuracy 60ppm of Range
- Current Accuracy 60ppm of Range

Applications

- End-Of-Line Testing
- In-House Calibration
- Control of Source-Sink Systems

Standards / Compliance

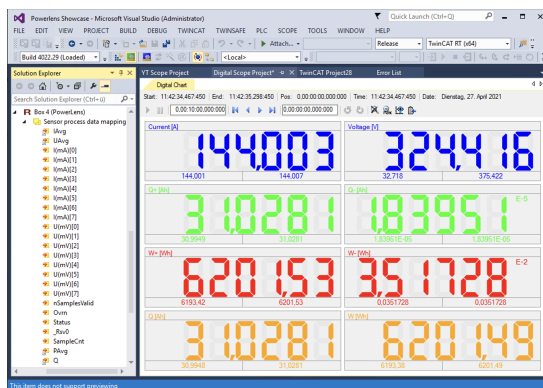
- EtherCAT[®]
- CAN Bus ISO 11898
- EMC Emission and Immunity: EN 61326-1:2013
- Health and Safety: EN 61010-1:2010 + A1:2019 + A1:2019/AC:2019 + EN 61010-2-030:2021 + A11:2021
- RoHS: EN IEC 63000:2018

EtherCAT® Parameters

- Averaged Current/Voltage/Power Values
- Up to 8 Current/Voltage Values for Bulk Transfer/Oversampling
- Operational Status / Overload Protection of the current transducer
- Counters for Electric Charge (Q+, Q- and ΔQ) in Ah
- Counters for Electric Energy (W+, W- and ΔW) in Wh
- Start/Stop/Reset mechanism for Q/W counters
- Overrun detection of AD converters (plus LED indicator)
- Offset - adjustable (manual/automated)

CAN Bus Parameters

- Averaged Current/Voltage/Power Value
- Counters for Electric Charge (Q+, Q- and ΔQ) in Ah
- Counters for Electric Energy (W+, W- and ΔW) in Wh
- Start/Stop/Reset mechanism for Q/W counters
- Operational Status and Overload Protection of the LEM transducer
- Overrun detection of AD converters (plus LED indicator)
- Configurable CAN message ID
- Bit Rate (1Mbps max.)
- Measurement cycle



Specification

Parameter	Description
Power Supply	9–36 Volt DC
Power Consumption	5W + Current Sensor
Mounting	DIN Rail in enclosures comply with EN 61439-1
Weight	0.35kg
Dimensions (H×W×D) in mm	100×90×117
EtherCAT® Cycle Time (min.)	50μs
Altitude	Maximum 2.000m, operational
Temperature operation/storage	+5 °C to +40 °C / +5 °C to +60 °C
Relative Humidity	0% to 70%, non-condensing
Required Pollution Degree	2
CAN Interface	D-SUB9 (CiA DS-102)
CAN Speed (max.)	1Mbps
CAN Cycle Time (min.)	1ms
ADC Technology	ΔΣ 24 Bit
Accuracy of Current Measurement	0.006% of Measuring Range
Accuracy of Voltage Measurement	0.006% of Measuring Range
Maintenance Interface	USB
Current Sensor Interface	Proprietary D-SUB9
Phase Shift of Voltage Measurement	< 0,2° at 1.2kHz
Input Impedance	>10MΩ 5pF
Bandwidth	1kHz
Isolation Rating	5kVrms