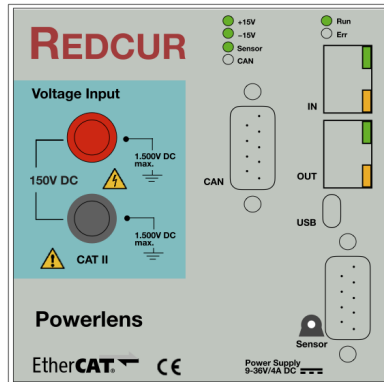
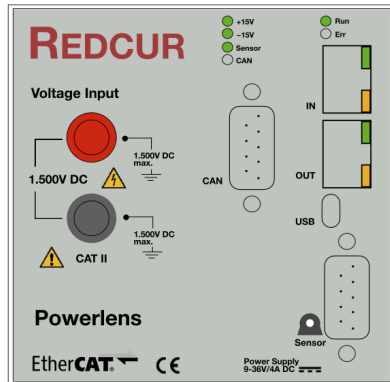


Precision DC Instrument on EtherCAT® and CAN bus



The Redcur Powerlens comes in versions for $\pm 1.500\text{ V}$ or $\pm 150\text{ V}$.

Features

- 24-Bit $\Delta\Sigma$ -ADCs with Clock-Sync Sampling of Current and Voltage
- Electric Charge - Counting ΔQ , $Q+$, $Q-$
- Electric Energy - Counting ΔW , $W+$, $W-$
- $I_{max} \pm 2.000\text{ A}$
- $U_{max} \pm 1.500\text{ V}$ or $\pm 150\text{ V}$ 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
- Battery Diagnostics

Standards / Compliance

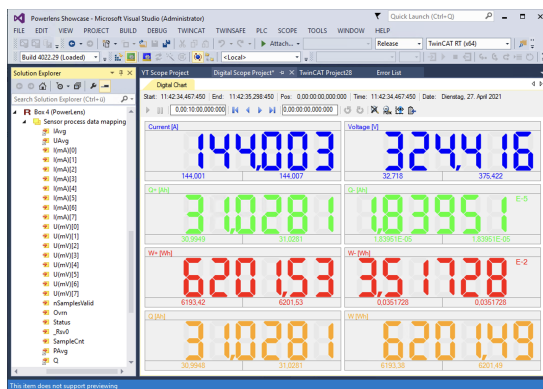
- EtherCAT®
- CAN Bus ISO 11898
- EMC Emission and Immunity: EN 61326-1:2013
- Health and Safety: EN 61010-1:2010 + A1:2019 + A1:2019/AC:2019 + EN 61010-2-030:2021 + A11:2021
- RoHS: EN IEC 63000:2018

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)

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.)
- 1 ms Minimum Measurement Cycle



Warranty

- 36 Months on System Functionality
- 15 Months on Specified Accuracy

Specification

Parameter	Description
Power Supply	9–36 Volt DC
Power Consumption (max.)	25W
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	$\Delta\Sigma$ 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
Input Impedance	>10M Ω 5pF
Isolation Rating	5kVrms

Product Variants

Variant	Transducer	Current _{max}
PL-CT100	CT100	100 A
PL-CT200	CT200	200 A
PL-CT400	CT400	400 A
PL-CT500	CT500	500 A
PL-CT1000	CT1000	1000 A
PL-CT2000	CT2000	2000 A
PL-IN100	IN100-S	100 A
PL-IN200	IN200-S	200 A
PL-IN400	IN400-S	400 A
PL-IN500	IN500-S	500 A
PL-IN1000	IN1000-S	1000 A
PL-IN2000	IN2000-S	2000 A

REDCUR GmbH

Reutersbrunnenstraße 27
 90429 Nürnberg - Germany
 Tel. +49.911.255099320
 Email: info@redcur.com
<http://www.redcur.com>