

ReCon T

Electrical Energy Logger

SPECIFICATIONS

Measured Parameters

- RMS Voltage.
- RMS Current.
- Active Reactive and apparent Power
- Power Factor
- Active and Reactive energy

Voltage range

- 300-400 V three-phase, 40-70 Hz.
- Delta and Wye connection.

Current Range

- 50 to 3000 Amps.

Integration periods

- 1s, 5s, 10s, 30s, 1m, 5m, 10m, 30m, 1h

Recording capacity

- Over 6 months with 10 minutes integration period.

Usability

- Built-in flexible current probes
- Built-in LCD display for real-time measurements
- Easy to use analysis and reporting software
- Isolated USB interface
- Isolated Ethernet interface with built-in web server
- Full feature software included
- Outdoor-use IP-65 protection
- Pole and wall mounting kit available

Dimensions and weight:

- Height: mm.
- Width: mm. (19")
- Depth: mm.
- Weight: 1,2 kg including cables and current probes.

Operational conditions:

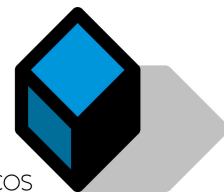
- Temperature: -10°C to 45°C
- Humidity: < 80%
- altitude: 2500 m.

Storage Conditions:

- Temperature: -20°C to 80°C
- Humidity: < 90% non condensing
- altitude: 2500 m.

CESINEL

COMPañÍA ESPAÑOLA DE INSTRUMENTOS ELÉCTRICOS



Compact and robust electrical energy logger

Today's increasing energy costs and environmental concerns demand more sophisticated energy recording tools. Knowing precisely where and when energy is used is the first steps in any energy management program. CESINEL ReCon series of high-performance electrical energy loggers set a new standard in functionality, versatility, compactness, and easy of use.

Preinstalled with built-in flexible coils, installing the logger is a matter of minutes. After installation the logger will automatically record all your energy consumption parameters for later retrieval, either via the local USB port or remotely via the built-in Ethernet adaptor.

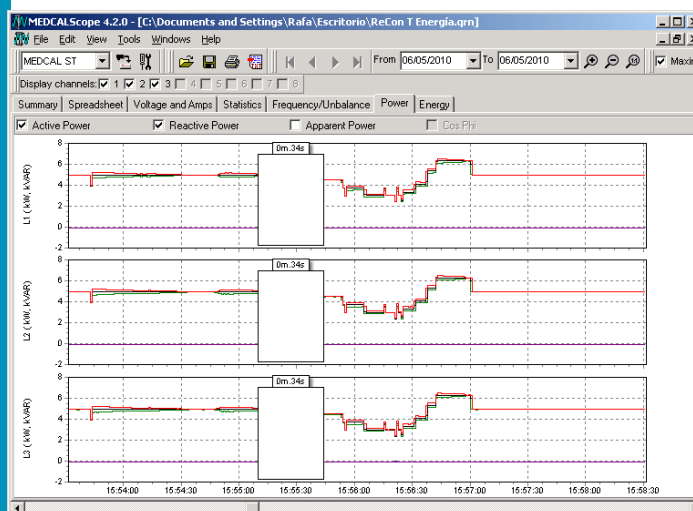
In addition to

Full feature software included

The included MEDCALScope software package is a sophisticated and simple to use tool that will help you in setting up your logger, producing printed reports, analyzing your power consumption patterns and saving your recordings for future reference or regulatory compliance.

Applications

- Understanding energy costs
- Improving efficiency
- Evaluating energy-saving devices
- Exploring alternative energy solutions
- Determining your carbon footprint
- Installation & building sub-metering



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Technical specifications

Input

Nominal Voltage (Un)	110 to 440 V (Ph-Ph)
Maximum over-voltage	1.5 x Un
Nominal Current (In)	200A, 800 A or 3200 A
Maximum over-current	1.5 x In
starting current	0.01 x In
Nominal frequency	50 Hz / 60 Hz
Frequency range (Fn)	±3 Hz over nominal frequency
PT ratio	Programmable 1 to 500
Voltage input burden	< 5 VA at Un
Current input burden	< 0,1 VA per phase at In
Supported electric topologies	Star, Delta, Single-Phase, Split-Phase



Measured parameters

Energy	Active and Reactive Energy, per phase and total
Energy precision	1 % according to EC / UNE-EN-62053-21
Power	Active, Reactive and Apparent Power, per phase and total, maximum, average and minimum
Power precision	1 % according to EC / UNE-EN-62053-21
Voltage	Phase-Neutral, maximum average and minimum
Voltage precision	1% according to EC / UNE-EN-61000-4-30
Current	maximum, average and minimum
Current precision	0,5% according to EC / UNE-EN-61000-4-30
Frequency	Maximum, average and minimum
Frequency precision	0,05 Hz according to EC / UNE-EN-61000-4-30

Display

Technology	Graphic backlit display
Digits	4 simultaneous parameters, 10 digits each
Units	Automatic V, A, W, Wh selection with appropriate k or M prefix
Display update rate	0,5 seconds

Recording functions

Recording rate	Programmable from 1 s to 30 m
No. of records	100.000 records
Memory configuration	Linear or circular
Type of memory	Non volatile flash-based memory

Communications

Optional RS-485 with ModBus protocol. 8 bits, 1 stop bit, Even Odd or No parity, 9600 to 115200 bps
 Optional 10 Mbps Ethernet with ModBus TCP protocol

Power consumption, RTC

Input voltage	90-240 V, DC or AC 50/60 Hz
Power consumption	< 5 W
RTC	Included: year, month, day, hour, minute, second, millisecond
Battery type for RTC	Auto rechargeable lithium cell, minimum life 5 years.

Safety and Electro-magnetic compatibility

Installation category	600V CAT III / 300 V CAT IV
Pollution degree	2
Isolation level	Double isolation
Safety standard	IEC / UNE-EN 61010-1
EMC emissions	IEC / UNE-EN 61000-6-3
EMC immunity	IEC / UNE-EN 61000-6-2

Physical and environmental data

Enclosure material	self-extinguishing ABS
Dimensions	7 DIN modules: 140 x 90 x 45 mm.
Weight	950 gr
Working temperature	-10° C to 65°C. Nominal temperature 20°C
Relative humidity	10% to 90 % N.C.
Protection degree	IP52,
Connections	4-mm safety banana connectors. Provided with crocodile clips.

MEDCALScope analysis software

