

Squirrel 1000 Energy series dataloggers

Eltek

SPECIALIST DATA LOGGERS

Specialist data loggers and accessories tailored for the electricity energy sector. For metering and recording AC voltage, current and temperature using a single comprehensive and accurate instrument.

Squirrel 1000 energy series data loggers and accessories enable quick, easy metering, monitoring and logging of load usage patterns enabling optimisation of power distribution, ultimately leading to improved reliability of power availability and power distribution plant costs.

Key Features

- 12 Bit for high accuracy and resolution
- Records average or instantaneous values for each channel
- Measures and records AC voltage, current and temperature
- Battery operation with up to 6 months unattended operation
- Fully portable
- Ideally suited for temporary and permanent installation
- Quick and easy configuration and download using Darca Software
- Remote access via GSM or Ethernet hardware options available
- Rogowski coil for high current measurement and outdoor use
- Display scaled to read out in primary conductor measured unit
- Non volatile memory offering up to 2 million readings
- All connections are plug and socketed
- Thermistor probe inputs (-25°C to 125°C)
- Pulse and Event/Digital inputs
- Standard air or surface temperature probe available
- 1010X and 1020X models have additional 1000A range for Minicoil

Model Types

Model	Number of inputs	AC inputs max	Temperature inputs max	Digital Input	Pulse Input
1010/1010X	8	8	2	1x8	1
1020/1020X	16	16	4	1x8	1

Standard Features

- 3 year warranty
- Calibration service
- Rapid repair and return service
- Hire Service

Optional Features

- Outdoor weather proof enclosure
- Increased memory options
- Alarm output
- Inputs for DC measurement
- GSM and Ethernet remote access kits

1010
1010X



1020
1020X



Outdoor system

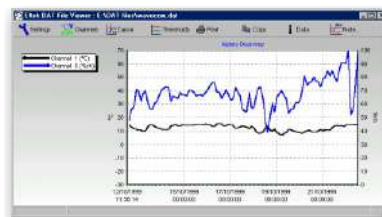


System Accessories

- RC1000 or Minicoil Rogowski Coil, Current Transducer
- VTS Voltage Transducer
- CT5 - 5 Amp Current Clamp
- CT75 - 7.5 Amp Current Clamp
- CS-U-V2-DIN Temperature Probe
- WB6 IP65 outdoor enclosure

Darca Plus Software

- A powerful setting up and graphing tool to display real-time or historical data
- Plots can be labelled at points of interest
- Summary window displays data and statistical information
- Data can be exported for analysis on other spread sheet programs
- "Shed" - automated contact scheduling utility built-in



Squirrel 1000 Energy series is a family of loggers dedicated to the energy industry. For other Squirrel products, ranging from general purpose to customised specialised product visit the Eltek web site at www.eltekdataloggers.co.uk

Application

Typical temporary or permanent installation measuring voltages, load currents and transformer temperature, e.g. on a pole mounted rural installation, or in a substation.

Temperature probe

Measures ambient or transformer core temp. (not visible in this installation)



WB6 Outdoor enclosure



The IP65 enclosure is fitted with oversized weather secure glands allowing the Din connector termination of the Rogowski Coil or temperature probe to pass through. All metal fittings of the enclosure are high grade stainless steel assuring reliable and durable usage.



RC1000 Rogowski Coil

The weatherproof transducer measures current in each phase. Can be installed easily, quickly and safely with no disruption to supply.



Range: 0-2000A. Other ranges and sizes are available e.g. Minicoil. Ideal for restricted space: 0-1000A (1010X /1020X only)



Data Analysis

Squirrel recorded data can be monitored or reviewed on the built in display and controls.

Data can be downloaded to a PC on site, by optional PC Card, or remotely via GSM, modem and landline or Ethernet for analysis using Darca Plus Software.

Specifications

Logging Modes

Interval / average / event / externally triggered

Log/Scan Interval

5 seconds to 24 hours

Analog Inputs

Accuracy: $\pm 0.1\%$ of reading, $+0.2\%$ of range span)

Digital Inputs

0/5V or volt free contacts
8 inputs per logger channel

Pulse counters

Each counter up to 2kHz signal or 100Hz volt free contact. A total of 65k counts.

Data memory

Internal memory: 250,000 readings
Option: 2 million readings
Memory modes; stop when full or overwrite current run

Display

2 line, 32-character, for readings status monitoring and configuration

Communications

RS232 half duplex - 9600 to 38.4K
Baud Modem compatible protocol

Darca Plus Software

Configuration, graphing and analysis

Power supply

Internal: 6 x AA Alkaline batteries
External: 9 to 14VDC (1.4watts)
Mains adapter: Type MP12U

Operating Environment

Temperature range: -30 to 65°C
Humidity: 95% non condensing.
For harsh environments an optional IP65 enclosure is available.

RC1000

Range: 0-2000A
Coil diameter: 14.5mm nominal
Coil length: 52cm
Lead length: 1.8m

Minicoil

Range: 0-1000A
Coil diameter: 6mm nominal
Coil length: 50cm
Lead length: 2m

Input type	Available ranges	Resolution	Accessory to be used
AC transducer	0 to 200A coil	0.2A	RC1000
	0 to 500A coil	0.5A	RC1000
	0 to 1000A coil	1A	RC1000
	0 to 2000A coil	2A	RC1000
	0 to 1000A CT	1A	CT1 Clamp
	0 to 300V	0.3V	VTS
	170 to 270V	0.1V	VTS270
Thermistor	-25.0 to 125.0°C	0.1°C	other sizes and ranges are available on request.
Pulse count	0 to 650,000	1	
	0 to 650,000	10	
Digital	0 to 255		
State	00000000 to 11111111		
1010X and 1020X models - additional range			
AC transducer	0 to 1000A	1A	Minicoil



The basic 1000 series logger is manufactured under licence from Grant Instruments (Cambridge) Ltd.