SQUIRREL 1000 ENERGY SERIES

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.

Eltek
S P E C I A L I S T
D A T A   L O G G E R S

Easy to use customised data loggers

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 down load using Darca Software
- Remote access via telephone line, GSM and Ethernet if equipped
- 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 125C)
- Pulse and Event/Digital inputs
- Standard air or surface temperature probe available

1010

1020

Outdoor system

Model Types

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

Common Features

3 year warranty
Calibration service
Accessories tested with logger
Rapid repair and return service
Hire Service

Optional Features

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

System Accessories

RC1000 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
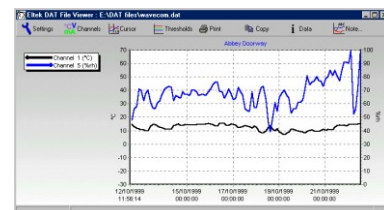
Darca Plus Software

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. Blanking plugs are supplied to retain weather protection when required.
All metal fittings of the enclosure are high grade stainless steel assuring reliable and durable usage.

Rogowski Coil

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

Data Analysis

Squirrel recorded data can be monitored or reviewed on the built in display and controls.
Data can be down loaded 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
5sec to 24 hours

Analog Inputs
Accuracy: ±(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 650K counts software selectable

Data memory
Internal memory: 64,000 readings
Option: 2 million readings or PC slot with SRAM card (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 - 2400 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: 12vDC 6watts

Case
Scratch resistant Nextel coated ABS. W: 180mm, H: 120mm, D: 1010 65mm, 1020 85mm

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

Input type	Available ranges	Resolution	Accessory to be used
AC transducer	0 to 200A coil	0.2A	RC100 Coil
	0 to 500A coil	0.5A	RC100 Coil
	0 to 1000A coil	1A	RC100 Coil
	0 to 2000A coil	2A	RC100 Coil
	0 to 1000A CT	1A	CT1 Current Clamp
	0 to 300V	0.3V	
	170 to 270V	0.1V	
Thermistor	-25.0 to 125.0°C	0.1°C	
Pulse count	0 to 650,000	1	
	0 to 650,000	10	
Digital State	0 to 255 00000000 to 11111111		

CE