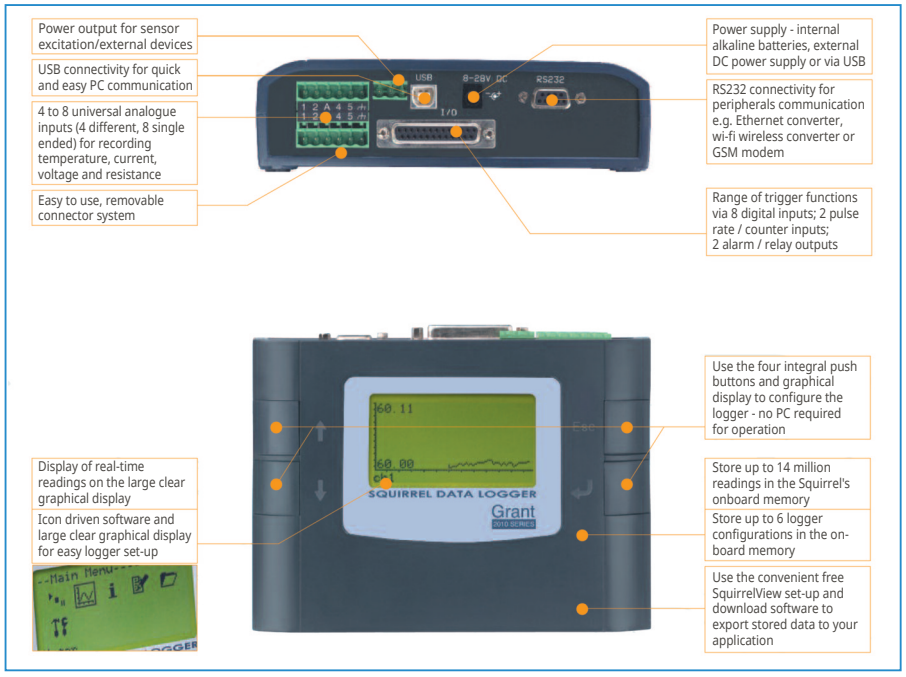
TEMPCON
MEASUREMENT • CONTROL • DATALOGGING SOLUTIONS

Squirrel 2010

Product Code **G200**

A powerful portable data logger



The Squirrel 2010 is a versatile, general purpose data logger, with 4 to 8 analogue input channels to measure current, voltage, resistance and temperature; plus 8 digital channels to automatically trigger or stop logging. An RS232 port is included, allowing connection to modems and other networking devices.

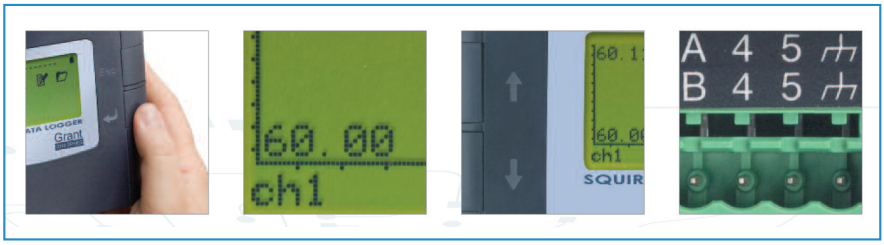
It is a compact, portable data logger which is also suitable for bench based and fixed installations. Easily programmed via the four integral push buttons and large graphical display and with a basic accuracy of 0.1%, the Squirrel 2010 is able to fulfil many routine data logging needs, including more demanding applications requiring up to 10 readings per second on one channel.

Key features

- **Compact, truly portable data logger**
- **4 to 8 universal analogue inputs (current, voltage, resistance, temperature) plus 8 digital inputs**
- **16 derived / calculated channels**
- **2 alarm outputs and 2 pulse counter inputs (1 at up to 64kHz, 1 at up to 100Hz)**
- **Configured via large easy-to-read graphical display**
- **0.1% accuracy of reading**
- **Store up to 14 million readings**
- **Supplied with SquirrelView set-up / download software**
- **Resistance**

Analogue inputs supported

- **Thermistors**
- **Thermocouples**
- **Voltage**
- **Current**
- **Resistance**
- **2-wire Pt100 / Pt1000**



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Squirrel 2010

No. of Analogue Channels	8 single ended or 4 differential inputsSQ2020-1F8		
Working Environment	- 30 to 65°C, RH up to 95% (non-condensing)		
Universal Input	Yes		
Voltage Ranges; Differential and Single Ended	-6V to 25V, -0.6V to 2.4V, ±0.3V, -0.15V to 0.15V, -0.075V to 0.075V -6V to 12V, -6V to 6V, -3V to 3V, -0.6V to 1.2V, -0.6V to 0.6V		
Common Mode	25V		
Current Ranges, Differential	4 to 20mA, -30 to +30mA		
(Requires external 10Ω shunt)			
	K-type - 200 to 1372°	**R-type** - 50 to 1768°C	**B-type** 250 to 1820°C
	T-type - 200 to 400°C	**S-type** - 50 to 1768°C	**C-type** 0 to 2320°C
	N-type - 200 to 1300°C	**J-type** - 200 to 1200°C	**D-type** 0 to 2320°C
Resistance Ranges, all 2 wire	0 to 1250R, 0 to 5000Ω, 0 to 300000Ω, 0 to 20000Ω		
Thermistor Ranges	U & UU-type -50 to 150°C	Y-type -50 to 150°C	
	Customer specific thermistors		
Pt100/1000, 2-wire	-200 to 850°C		
Internal Reference Temperature	-50 to 150°C		
Pulse Count Range	0 to 100Hz (1 input)	0 to 64kHz (1 input)	0 to 16000000 Count
Digital State/Event Ranges	8 state inputs or 1 x 8 bit binary		
Digital/Alarm Outputs	2 open drain FETs, 18V, 0.1A		
A/D Resolution	24 bit		
Accuracy	0.1% of range + 0.1% of reading		
Clock Resolution/Accuracy	1s/10ppm Normal Mode – each input sampled at a maximum rate of 1 reading per second. Double-speed (mains reject off) – one input can be sampled at 10 readings per second and all others are sampled at a maximum rate of 1 reading per second		
No of Intervals	4		
Data Scaling	Yes		
Data Statistics	Yes from within SquirelView Plus PC software		
Calculated Channels	Yes, up to 16		
Memory Internal	16Mb (up to 14 million readings)		
Display/Keypad	128*64 dot graphical display, 4 button keypad		
Internal Battery	2 x C cells		
Battery Life	Up to 5 days with continuous usage whilst sampling all channels once per second		
External Power	Yes, 8 to 28V dc & USB when plugged in		
Sensor Power Output	5V at 50mA, external 8-28V at 100mA (when connected)		
Networking	Via RS232 to Ethernet adaptor or RS232 to Wi-Fi adaptor		
Modem Support	Via RS232 modem (GSM Modem, part no. SQ20A802)		
Actions & Triggers	Two alarm outputs, fully configurable actions and triggers		
PC Setup	Yes, SquirrelView compatible		
Front Panel Setup	Via 4 integral 4 keys. All essential functionality available via key pad e.g. channel configuration, start / stop logging etc. Other advanced functions e.g. calculated channels and channel descriptions are available via connection to a PC running SquirrelView		
Stored Setups	6		
Third Party Programming	As 20xx driver suite allows		
Operating Temperature	-20 to 65°C		
Dimensions (w x d x h)	175 mm x 135 mm x 55 mm, Weight 0.7 kg		

Note: supplied with software, SQ2010 manual, USB cable, batteries and 4 current shunt resistors.

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