LOGBOX SE Data Logger

Specifications	
Differential inputs 24 bit	4 x ±19 to ±2500 mV selectable
Single ended inputs 12 bit	2 x 0 to 2500 mV 2 x 0 to 3000 mV
Digital inputs	4 x time, frequency or counter Max. 1500 Hz 3 x 3 V level 1 x 0.5 V level for CSD3
Max. number of 10k thermistors	4 x using 2 wires on single ended input
Max. numbers of Pt-100 thermistors	1 x using 4 wires on 2 differential inputs
RS-485 inputs	1 physical input for max. 8 sensors in parallel SMP, SHP, SGR and SUV supported
Input offset differential max.	0.5 µV
Inaccuracy differential	0.05 %
Inaccuracy single ended	0.1 %
Memory	SD card (512 MB supplied)
Measurement interval	From 1 to 3600 seconds
Logging period	1 to 3600 seconds with average and optionally Min, Max and StdDev
Converting to engineering units	Using up to 16 different programmable 3rd order polynomials
Communication	USB with box open for setup RS-232 for setup and data transfer GSM modem for scheduled data transfer via email or FTP every 1 to 24 hours
Internal power supply	6 x AA battery
Power connection (PWR)	4 to 24 VDC
Solar power connection (SOLAR)	12 to 20 VDC solar panel
Battery power connection (BATT)	12 VDC lead acid battery
Charger connection (CHARGER)	6 to 13 VDC for lead acid battery
Battery out (BATOUT)	12V -750mA
Temperature range	-40 to 60 °C
Dimensions	170 x 145 x 50 mm
Protection	IP65
Mounting	ø 45 mm pole mount
RTC accuracy (without synchronization)	10 ppm
Time synchronization	Once a day over internet when GSM is activated
GSM modem	Cinterion MC75i
Modem bands	2G GPRS, Quad band 850, 900, 1800 and 1900 MHz

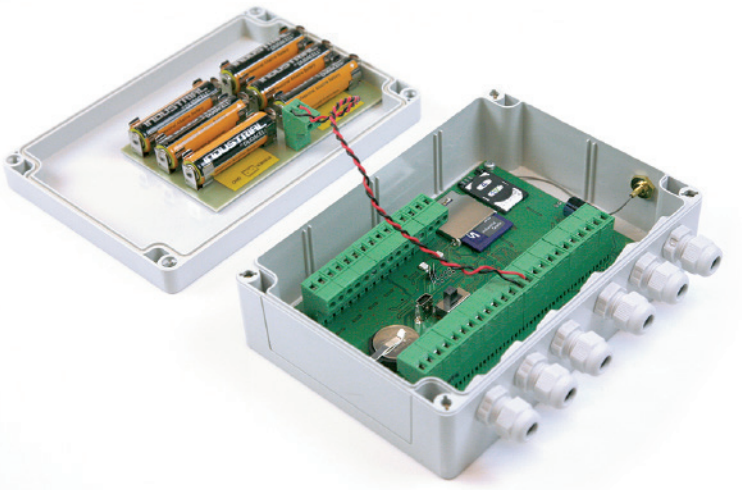
Ultra Low Power Data Logging

Certain applications require measurement data to be collected from just a single sensor or a small number of instruments with minimal power consumption. For example, long term measurements in remote locations where no power infrastructure is available. In these cases, having many input channels or a complex data acquisition system is not necessary or even desirable.

The LOGBOX SE data logger combines a low power data acquisition system with high measurement accuracy and a GSM modem in a compact weather-proof enclosure. The LOGBOX SE is ideal for unattended operation even if no power is available. The data logger runs for over 2 months on 6x AA type batteries or from an external power supply such as a battery or solar panel and battery. The LOGBOX SE is supplied with a 512 MB SD-memory card for over a year of data storage. Its enclosure is weather-proof, rated at IP 65, and is supplied with an adjustable mounting bracket, allowing for easy installation on virtually any surface or meteorological mast. The small GSM antenna is magnetic but can also be glued to any surface.

LOGBOX SE is supplied with user-friendly Windows™ software to make configuration fast and simple. All sensors can be programmed by selecting an input range and defining the calculation to convert to the correct engineering units. The LOGBOX SE, for example, records the data of a complete four component net radiometer like the CNR4, including temperature, with excellent accuracy. Naturally the LOGBOX SE accepts inputs from all our solar instruments including the Smart versions using RS-485.

Smart sensors cannot be powered by the internal batteries and will need an additional power supply.



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