

S-BOX

The S-Box is an advanced battery data logger designed to continuously monitor standby batteries via the Sentinel intelligent transducer. The S-Box collects and stores key electrical parameters of the batteries being monitored. This data is compared against easily-configurable alarm/event thresholds and provides valuable information on the performance of each bloc and overall battery health. The S-Box includes installation software (SIMS) that allows easy commissioning and maintenance of the system, as well as display software (CellView Net) to plot and trend the data graphically.



Electrical data

V_c	DC supply voltage ¹⁾	+ 20 .. + 30	V
I_c	Typical current consumption	@ 24 V DC	115 mA
		max.	2 A
V_{Bat}	Output DC voltage for Backup-Battery	max. 13.8	V
I_{Bat}	Typical DC current for Backup-Battery	90	mA
	Internal battery for Clock and RAM Backup (dataloging):		
	Typical DC voltage	3	V
	Max. life time in use	265	Days
	Digital Outputs: single contact relay rating @ 50°C ²⁾ :		
	Quantity	4	
	@ 150 V AC	max. 3	A
	@ 30 V DC	max. 3	A
	@ 110 V DC	max. 0.2	A
	Max AC voltage	150	V
	Analog inputs: 4 .. 20 mAQuantity	6	
	Resolution (13 bits)	typical 2.93	µA
	Analog inputs Pt1000	Quantity	2
	Mode	2 wires	
	Resolution	14	Bits
	Resolution	0.1	°C
	Range	Typical - 40 .. 85	°C
	Accuracy	± 2.5	°C

Communication

Built-in communication Ports	1 Ethernet (10/100Base T-RJ45)
S-Bus converter connection	RS232 - 3 wires
Maximum Sentinel on Bus	254
Maximum string	6

General data

T_A	Ambient operating temperature	- 25 .. + 65	°C
T_S	Ambient storage temperature	- 40 .. + 80	°C
	Max relative humidity without condensing	95	%
m	Mass	300	g
	Standards	EN 60950-1: 2005 (2 nd Edition) EN 61000-6-4 EN 61000-6-2	

Approvals CSA

Notes: ¹⁾ Power supply must comply with limited energy circuit criteria.

²⁾ Resistive load.



Features

- Remote monitoring and configuration
- Fast, simple set up process
- Easily configurable alarms per bloc
- 4 configurable relays for alarms
- 6 analog inputs (4 .. 20 mA) for string charge /discharge transducers
- 2 Pt1000 inputs for ambient temperature measurement
- DIN rail mounting
- Ethernet communication
- Dedicated RS-232 for S-Bus Converter communications with Sentinels
- Data storage
- Charger for external Backup-Battery.

Monitors and logs

- Bloc voltage
- String voltage
- Bloc temperature
- Bloc impedance
- Discharge performance data
- Discharge/Charge current
- Daily measurements.

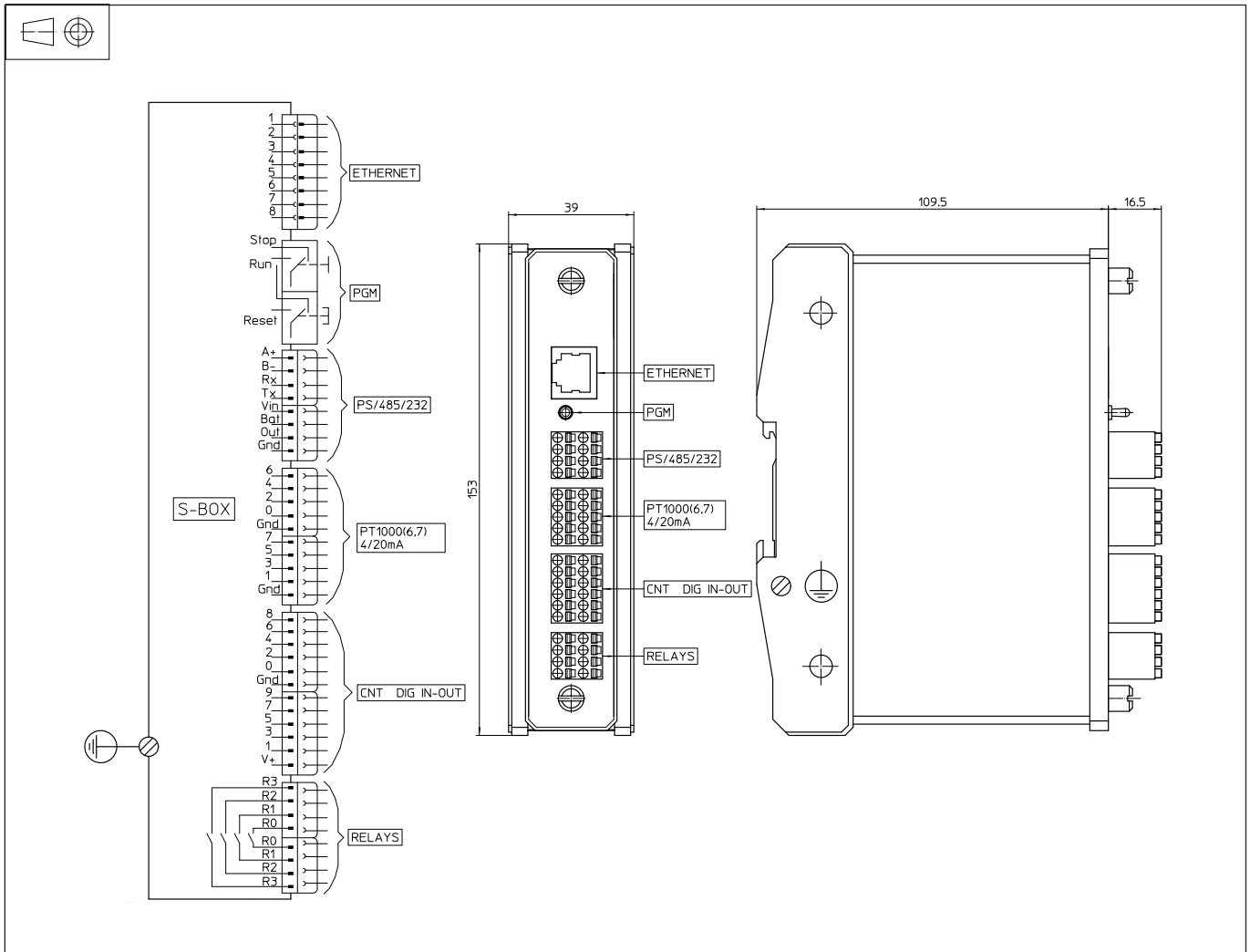
Applications

- UPS
- Telecommunications
- Battery supplied applications
- Utilities
- Fire & Safety system
- Remote monitoring.

Application Domains

- Energy & Automation
- Industrial.

Dimensions S-Box (in mm.)



Isolation characteristics

- Isolation Class 1



This device must be connected to earth (ground), use the screw as indicated above.

Mechanical characteristics

- General tolerance ± 1 mm
- Device fixing DIN rail rear box
- Connection terminal use cable max. cross section 1.5 mm^2 (AWG 16)

Safety



This device must be used an electric/electronic equipment with respect to applicable standards and safety requirements in accordance with the manufacturer's operating instructions.



Caution, risk of electrical shock:
Do not remove any parts of the S-Box