

Conext Battery Monitor

Battery bank monitoring with
battery string health detection.



Product at a glance

Conext™ Battery Monitor indicates hours of battery-based runtime and determines battery bank state of charge. It shares key battery bank parameters with Conext XW+ inverter/chargers improving overall system performance of 24 V and 48 V battery banks. Detecting battery string imbalance is determined using innovative mid-point sensing technology providing time to address the issue before performance is significantly impacted.

Conext Battery Monitor features built-in data logging and a local display to selectively show the voltage, current, consumed amp-hours, remaining capacity, and remaining hours. The same information and battery bank data is reported by ComBox and distributed to other Conext devices such as XW+ inverter chargers, MPPT Solar Charge Controllers, Automatic Generator Start module, and System Control Panel via Xanbus™ network connectivity, enhancing performance of the overall system.

Industrial and telecom customers can integrate Conext Battery Monitor with energy management systems over Modbus RS485.

Why choose Conext Battery Monitor?

Higher return on investment

- Get the most out of battery-based Conext inverter/charger systems
- Clearly understand hours of available battery-based autonomy
- Detect imbalance between battery strings before it becomes an issue

Designed for reliability

- Extensive quality and reliability testing
- Highly Accelerated Life Testing (HALT)

Flexible

- Stand-alone application or integration with Conext XW+ inverter charger systems
- Enables state of charge triggers for AGS module control of diesel generators
- Enables balancing of multi-battery bank systems for large clustered Conext XW+ inverter/charger systems

Easy to service

- Remotely monitor, troubleshoot, or upgrade firmware with Conext ComBox
- Built-in data logger

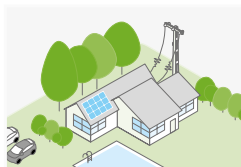
Easy to install

- Wall-mount, DIN-rail mount, panel mount
- RJ45 connections for Xanbus network and battery signals
- Configure with front-panel buttons, Conext ComBox, or RS485 Modbus

Product applications



Backup power



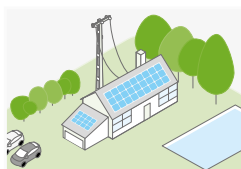
Residential grid-tie solar
with backup power



Off-grid solar



Community electrification



Self-consumption

Device short name	Conext Battery Monitor
Electrical specifications	
Supply voltage	18 – 66 Vdc
Supply current (backlight off, logging-disabled)	80 mA @ VIN=48 Vdc, 150 mA @ VIN=24 Vdc
Input voltage range	0 – 70 Vdc
Input current range	-9999 – +9999 A
Battery capacity range	20 – 10,000 Ah
Operating temperature range	-20 – +50 °C
Displayed increments	
Voltage	0 – 70 V (0.01 V)
Current	0 – 200 A/200 – 9999 A (0.1 A/1 A)
Amp-hours	0 – 200 Ah/200 – 99990 Ah (0.1 Ah/1 Ah)
State of charge	0 – 100% (0.1%)
Time remaining	0 – 24 hrs/24 – 240 hrs (1 min/1 hr)
Temperature	-20 to +50 °C (0.1 °C)
Accuracy	
Voltage measurement	+/- 0.3%
Current measurement	+/- 0.4%
Features	
Network	Protocol: Xanbus/Connectors: RJ45
USB 2.0	Protocol: MSD (data extraction) Connector: USB mini-B
Modbus	Isolated RS-485, 2-wire serial
Data logging	10 data points every 10 mins for 10 years
Display	Backlight LCD
Front-panel interface	3 menu buttons, 1 power button
Battery string imbalance detection	Two point sensing
Temperature sensor(included)	762 cm
Warranty	2 – 5 years (depending on country)
General specifications	
Product dimensions (H x W x D)	8.5 x 8.5 x 9.0 cm (3.3 x 3.3 x 3.5 in)
Product/shipping weight	0.2 kg (0.4 lb)/1.95 kg (4.3 lb)
Mounting options	Panel-mount, wall-mount, DIN rail: 35 mm
IP rating/location	IP 20, NEMA 1, indoor only
Storage temperature range	-30 – +70 °C
Part number	865-1080-01
Battery interface kit with shunt (included)	
Connection to battery	300 cm cable with ring terminals
Connection to battery monitor	500 cm CAT5 cable RJ45
Shunt	500 A/50 mv
Regulatory approvals	
Markings	CE, RCM, UL, CSA
Safety	IEC/EN62109-1, UL1741, CSA 107.1
EMC	Directive 2004/108/EC, IEC/EN61000-6-3, IEC/EN61000-6-1, FCC Part 15 Class B, Industry Canada ICES-003 Class B
Compatible products	
Conext XW+ (230 V)	XW 7048 E product no. 865-7048-61/XW 8548 E product no. 865-8548-61
Conext XW+ (120/240 V)	XW 5548 NA product no. 865-5548-01/XW 6848 NA product no. 865-6848-01
Conext SW (230 V)	SW 2524 product no. 865-2524-61/SW 4024 product no. 865-4024-61/SW 4048 product no. 865-4048-61
Conext SW (120 V)	SW 2524 product no. 865-2524/SW 4024 product no. 865-4024/ SW 4048 product no. 865-4048
Conext MPPT 80 600	Product no. 865-1032
Conext MPPT 60 150	Product no. 865-1030-1
Conext System Control Panel	Product no. 865-1050
Conext Automatic Generator Start	Product no. 865-1060
Conext ComBox	Product no. 865-1058
Conext Portable Installation and Configuration Tool	Product no. 865-1155-01

Specifications are subject to change without notice.

Schneider Electric
Head Office
35 rue Joseph Monier
92500 Rueil-Malmaison, France
Tel : +33 (0)1 41 29 70 00
solar.schneider-electric.com

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