

# 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



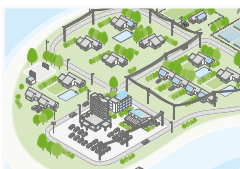
Backup power



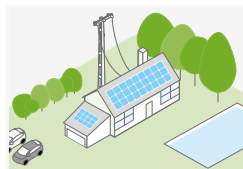
Residential grid-tie solar  
with backup power



Off-grid solar



Community electrification



Self-consumption

Device short name	Conext Battery Monitor
<b>Electrical specifications</b>	
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
<b>Displayed increments</b>	
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)
<b>Accuracy</b>	
Voltage measurement	+/- 0.3%
Current measurement	+/- 0.4%
<b>Features</b>	
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)
<b>General specifications</b>	
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
<b>Battery interface kit with shunt (included)</b>	
Connection to battery	300 cm cable with ring terminals
Connection to battery monitor	500 cm CAT5 cable RJ45
Shunt	500 A/50 mv
<b>Regulatory approvals</b>	
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
<b>Compatible products</b>	
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.