Conext Battery Monitor

Battery bank monitoring with battery string health detection

Conext™ Battery Monitor indicates hours of battery based runtime and determines battery bank state of charge. Conext Battery Monitor shares key battery bank parameters with Conext XW+ inverter/chargers improving overall system performance of 24V and 48V 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 as well as 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
- Cleary 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
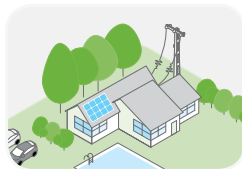- Built-in data logger

Easy to install
- Wall-mount, DIN-rail mount, panel mount
- RJ45 connections for XanBus network and battery signals
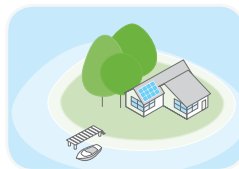- Configure with front-panel buttons, Conext ComBox or RS485 Modbus
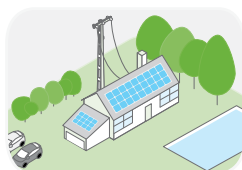
Product applications

Backup power

Residential grid-tie solar with backup power

Off-grid solar

Community electrification

Self-consumption

solar.schneider-electric.com

Schneider Electric

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 approval	
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.