

# MPPT 80 600 solar charge controller

## Install for less, harvest more energy

The MPPT 80 600 solar charge controller offers an industry-first set of integration features and top performance that allows for large PV array systems to be easily installed and connected to the battery bank at the lowest overall cost. Installing one MPPT 80 600 is faster than installing multiple smaller charge controllers and lowers overall costs further by utilising fewer PV strings, smaller wiring and conduit, and by eliminating the need for PV combiner boxes and DC circuit breakers. Longer distances from array site to battery bank are also easier to accommodate than with smaller charge controllers. Advanced Fast Sweep™ MPPT charging technology helps harvest the most energy available from the PV array, even in partial shade conditions. 80A of battery charge current allows for the connection of PV arrays rated up to 600V STC (2560W for 24V systems, 4800W for 48V systems).

### Why choose MPPT 80 600?



#### True bankability

- Warranty from a trusted partner with over 177 years of experience
- World leader in industrial power drives, UPS and electrical distribution
- Strong service infrastructure worldwide to support your global needs



#### Higher return on investment

- Installs faster with fewer costly components
- Improve battery life with selectable multi-stage temperature compensated charging
- Harvest more energy with shade tolerant fast sweep MPPT algorithm



#### Designed for reliability

- Robust design through rigorous Multiple Environmental Over Stress Testing (MEOST)



#### Flexible

- Available remote monitoring and configuration
- Compatible with any brand of PV module, any grounding method
- Stand-alone application or full integration with Conext SW or XW inverter charger systems



#### Easy to install

- Fewer string wires
- Smaller AWG Wire
- No need for combiner box



### Product applications



Residential, backup power and grid-tie



Small commercial, backup power and grid-tie



Off-grid solar



Community electrification

<b>Device short name</b>	<b>MPPT 80 600</b>
<b>Electrical specifications</b>	
Nominal battery voltage	24 and 48V (default is 48V)
Max. PV array voltage (operating)	195 to 550V
Max. PV array open circuit voltage	600 V including temperature correction factor
Battery voltage operating range	16 to 67V d.c.
Array short-circuit current	35A (28A @ STC)
Max. charge current	80A
Max. and min. wire size in conduit	#6 AWG to #14 AWG (13.5 to 2.5mm <sup>2</sup> )
Max. output power	2560W (nominal 24V), 4800W (nominal 48V)
Charger regulation method	Three-stage (bulk, absorption, float) plus manual equalisation Two-stage (bulk, absorption) plus manual equalisation
Supported battery types	Flooded, GEL, AGM, Custom
<b>Efficiency</b>	
Max. power conversion efficiency	94% (nominal 24V), 96% (nominal 48V)
<b>General specifications</b>	
Power consumption, night time	< 1W
Battery temperature sensor	Included
Auxiliary output	Dry contact switching up to 60V d.c., 30V a.c., 8A
Enclosure material	Indoor, ventilated, aluminum sheet metal chassis with 22.22mm and 27.76mm (7/8in and 1in) knockouts and aluminum heat sink
IP degree of protection	IP20
Product weight	13.5kg (29.8lb)
Shipping weight	17.4kg (38.3lb)
Product dimensions (H x W x D)	76.0 x 22.0 x 22.0cm (30.0 x 8.6 x 8.6in)
Shipping dimensions (H x W x D)	87.0 x 33.0 x 27.0cm (34.3 x 13.0 x 10.6in)
Device mounting	Vertical wall mount
Ambient air temperature for operation	-20°C to 65°C (-4°F to 149°F), power derating above 45°C
Storage temperature range	-40°C to 85°C (-40°F to 185°F)
Operating altitude	Sea level to 2000m (6562ft)
System network and remote monitoring	Available
Warranty	Five-year standard
Part number	865-1032
<b>Regulatory approval</b>	
Safety	CSA Certified (UL1741, CSA 107.1) and CE Marked for the Low Voltage Directive (EN50178)
EMC	FCC and Industry Canada (Class B), CE Marked for the EMC Directive (EN61000-6-1, -6-3), C-Tick compliant

Specifications are subject to change without notice.

**MPPT 80 600 solar charge controller works with the following Schneider Electric products**



**Conext XW inverter/charger (230V/50Hz)**  
 XW 4024 Product no. 865-1045-61  
 XW4548 Product no. 865-1040-61  
 XW 6048 Product no. 865-1035-61



**Conext SW inverter/charger**  
 SW 2524 230 Product no. 865-2524-61  
 SW 4024 230 Product no. 865-4024-61



**System Control Panel (SCP)**  
 Product no. 865-1050



**Automatic Generator Start (AGS)**  
 Product no. 865-1060



**Conext Combox communication device**  
 Product no. 865-1058