

MPS series (45 – 80 A)

Modular Power Switch



- 12/24/48 V (automatic oder manual)
- Low voltage disconnect (adjustable)
- Overcharge protection
- Pulse-width modulation
- Two-point series switching
- Diversion control
- Excess energy management
- Flexible grounding
- DIN rail mounting

MPS is Phocos' innovative new multi-functional power switching module for stand-alone power supplies. It can be configured to operate as a charge controller, load controller or diversion controller by simple toggling of DIP switch settings.

A single MPS unit can control up to 80 A of current at 12, 24 or 48 V and switching can be set for pulse-width modulation or two-point series switching. When configured as a diversion controller, MPS can also control a diversion load for wind and micro-hydro turbine systems.

MPS offers integrated, adjustable low voltage disconnect as a load controller and sophisticated overcharge protection as a solar charge controller. The new flexible power electronics allow for positive or negative grounding.

The power switch is a fundamental unit within Phocos' innovative Modular Power Management family. Multiple MPS units can be operated together with the help of Phocos' MCU modular control unit. This allows multiple strings of solar inputs to be used to charge the same battery bank at an aggregate charge current of up to 320 A. Used as load controllers, multiple MPS units can control up to 200 A of total load current.

MPS is a cost-effective, simple, yet versatile power switch that is a valuable solution for stand-alone solar, wind, micro-hydro or hybrid power supplies.

Type	MPS 45	MPS 80
Nominal voltage	12/24/48 V (automatic oder manual)	
Load current max.	45 A	80 A
Self consumption	< 10 mA	
Ambient temperature	-40 to +50 °C	
Dimensions (W x H x D)	108 x 150 x 112 mm	
Weight	1,007 g	1,100 g
Type of protection	IP22	