



Made in  
Germany



5 Years  
Warranty

# MPT<sup>®</sup> Xtra

Charge Controller

Rough environmental condition -Fine! The charge controllers with IP65 protection are reliable even with existence of dust, sand, humidity or insects.

The MPT<sup>®</sup> Xtra charge controllers are especially developed to realize solar systems with a higher solar voltage. Standard charge controller are not suitable. On the market there is available a wide range of low-cost solar modules with 48 up to 72 cells with a higher voltage.

Installation time and effort is reduced because of the advantage of the series wiring of the solar modules.

In addition the Xtra MPT<sup>®</sup> charge controllers generate a higher electric power yield as well during diffused light and when the solar module temperature is high.

# MSTE SOLAR

## MPT<sup>®</sup> 460-24

### Technical Data

#### DC-input (solar)

Maximum power	460W
Maximum voltage	145V
Recommended MPP-voltage	33V to 72V
Maximum current	13A

#### DC-output (battery)

System voltage	24V
Voltage range	15V to 32V
Maximum charging current (nom. power)	20A
Types of battery	Lead-Gel, AGM, Acid, Lithium-Ion (adjustable)
Final charging voltage	27V to 29,4V (adjustable)
Final charging voltage Lithium-Ion	28,8V at delivery, factory modifiable

### Features

Display	1 LED: green
Protective Devices	reverse current, overvoltage (fine protection) , over-temperature, overload, reverse battery, short-circuit, overcurrent
Derating overtemperature of the device	>50°C
Interface	TTL serial, BMS, temperature sensor KTY

### General Data

Efficiency	<99%
Parallel Operation	up to 8 charge controllers
Self-consumption	0,24W/10mA
Cooling method	passive cooling, without fan
Degree of protection (IEC60529)	IP65
Temperature range (nom. power)	-25°C to +35°C
Dimensions (W/H/D)	275mm/192mm/85mm
Weight	3kg
Enclosure	steel, coated
Recommended wire cross section	6mm <sup>2</sup>
Certificate	conformity EMC89/336/EEC