



Made in
Germany

MSTE SOLAR



**5 Years
Warranty**

MPT[®] Up

Charge Controller

The MPT[®] Up are the ideal upward charge controllers for small modules (36 cells) with 12V solar voltage. The MPT[®] Up are unique: in case of low irradiation conventional charge controller stop charging. But the MPT[®] Up are still working! The MPT[®] Up charge controllers change into pulsed operation, the solar power will be collected and pulsed to the battery. The energy yield is increased. Quite remarkable is the very small self-consumption at night with less than 0,15mA!

MPT[®] 170-48-Li

Technical Data

DC-input (solar)

Maximum power	170W
Maximum voltage	28V
Recommended MPP-voltage	16,5V to 19V
Maximum current	11A

DC-output (battery)

System voltage	48V
Voltage range	10V to 60V
Maximum charging current (nom. power)	4A
Types of battery	Lithium-Ion
Final charging voltage Lithium-Ion	57,6V at delivery, factory modifiable

Features

Display	3 LED: red, green, yellow
Protective Devices	reverse current, overvoltage (fine protection) , reverse battery (external), short-circuit (external), overcurrent (external)
Interface	BMS

General Data

Efficiency	<96%
Parallel Operation	up to 8 charge controllers
Self-consumption	0,007W/0,15mA
Cooling method	passive cooling, without fan
Degree of protection (IEC60529)	IP30
Temperature range (nom. power)	-25°C to +50°C
Dimensions (W/H/D)	130mm/125mm/45mm
Weight	0,45kg
Enclosure	aluminium, coated
Recommended wire cross section	4mm ²
Certificate	conformity EMC89/336/EEC