



Made in  
Germany

**MSTE SOLAR**



**5 Years  
Warranty**

# MPT<sup>®</sup> Xtra

Charge Controller

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.

| MPT <sup>®</sup> 290-12                |  |
|--|--|
| Technical Data                         |  |
| DC-input (solar)                       |  |
| Maximum power                          | 290W   |
| Maximum voltage                        | 58V  |
| Recommended MPP-voltage                | 20V to 42V   |
| Maximum current                        | 25A  |
| DC-output (battery)                    |  |
| System voltage                         | 12V  |
| Voltage range                          | 9,5V to 16V  |
| Maximum charging current (nom. power)  | 26A  |
| Types of battery                       | Lead-Gel, AGM, Acid, Lithium-Ion (adjustable)  |
| Final charging voltage                 | 13,5V to 14,7V (adjustable)  |
| Final charging voltage Lithium-Ion     | 14,4V at delivery, factory modifiable  |
| Features                               |  |
| Display                                | 1 LED: red   |
| Protective Devices                     | reverse current, overvoltage (fine protection) , over-temperature, overload, reverse battery, short-circuit, overcurrent |
| Derating overtemperature of the device | >50°C  |
| Interface                              | BATCONTROLLER <sup>®</sup> E, TTL serial, BMS, temperature sensor KTY, external LED                                      |
| General Data                           |  |
| Efficiency                             | <97%   |
| Parallel Operation                     | up to 8 charge controllers   |
| Self-consumption                       | 0,12W/10mA   |
| Cooling method                         | Convection with fan >45°C, 25dB(A)   |
| Degree of protection (IEC60529)        | IP20   |
| Temperature range (nom. power)         | -25°C to +35°C   |
| Dimensions (W/H/D)                     | 155mm/132mm/68mm   |
| Weight                                 | 0,7kg  |
| Enclosure                              | aluminium, coated  |
| Recommended wire cross section         | 6mm <sup>2</sup>   |
| Certificate                            | conformity EMC89/336/EEC   |