

## VT Series MPPT Solar Charge Controller

### FEATURES

- MPPT algorithm
- Rugged and durable, IP 54 classification
- Full protection against incorrect wiring
- High conversion efficiency 98%
- 4 step charger for longer battery life
- Low self-consumption <1W in night time mode
- Up to 15 Variotrack in parallel
- Optimal usage in Xtender system with synchronized battery management
- Display with 7 LEDs showing status and current
- 5 Year warranty



| Model   | VT-65   |                |                |
|---|---|----------------|----------------|
| Maximum Solar power recommended (@STC)                                | 12 V<br>1000 W  | 24 V<br>2000 W | 48 V<br>4000 W |
| Maximum Solar Open Circuit Voltage                                    | 80 Vdc  |                |                |
| Maximum Solar functional circuit voltage                              | 75 Vdc  |                |                |
| <b>Electrical characteristics Battery side</b>                        |   |                |                |
| Maximum Output Current  | 65 A  |                |                |
| Nominal Battery Voltages  | Automatic / manual set to 12, 24 or 48 Vdc                                |                |                |
| Operating voltage range   | Above battery voltage minimum 7V  |                |                |
| <b>Performances of the device</b>                                     |   |                |                |
| Power Conversion Efficiency<br>(in a 48 V typical-system)             | 98 %  |                |                |
| Maximum Stand-By Self-consumption (48 V)                              | 25 mA > 1.2 W   |                |                |
| Maximum Stand-By Self-consumption (24 V)                              | 30 mA > 0.8 W   |                |                |
| Maximum Stand-By Self-consumption (12 V)                              | 35 mA > 0.5 W   |                |                |
| Charging stages   | 4 stages : Bulk, Absorption, Float, Equalization                          |                |                |
| Battery temperature compensation<br>(available with accessory BTS-01) | -3 mV / °C / cell (25 °C ref) default value<br>Adjustable -8 to 0 mV / °C |                |                |
| <b>Electronic protections</b>   |   |                |                |
| PV reverse polarity   | Protected   |                |                |
| Battery reverse polarity  | Up to -150 Vdc  |                |                |
| Battery overvoltage   | Up to 150 Vdc   |                |                |
| Over temperature  | Protected   |                |                |
| Reverse current at night  | Prevented by relays   |                |                |
| <b>Environment</b>  |   |                |                |
| Operating Ambient Temperature Range                                   | -20 to 55 °C  |                |                |
| Humidity  | 100 %   |                |                |
| Ingress Protection of enclosures                                      | IP54, IEC/EN 60529:2001   |                |                |
| Mounting location   | Indoor  |                |                |
| <b>General data</b>   |   |                |                |
| Weight  | 5,2 Kgs   |                |                |
| Dimensions (LxWxH)  | 310 x 220 x 120 mm  |                |                |
| Parallel operation (separated PV arrays)                              | Up to 15 devices  |                |                |
| Max wire size   | 35 mm <sup>2</sup>  |                |                |
| Glands  | M 20 x 1,5  |                |                |
| <b>Communication</b>  |   |                |                |
| Networking Cabling  | Communications BUS  |                |                |
| Remote Display and Controller   | RCC-02/-03/ Xcom-232i   |                |                |
| Menu languages  | English / French / German / Spanish                                       |                |                |
| Data Logging  | With RCC-02/03 on SD card • One point every minute                        |                |                |
| <b>Accordance to standards</b>  |   |                |                |
| CE compliant  | EMC 2004/108/CE • LV 2006/95/CE • RoHS 2002/95/CE                         |                |                |
| Safety  | IEC/EN 62109-1:2010   |                |                |
| EMC (Electro Magnetic Compatibility)                                  | IEC/EN 61000-6-3:2011 • IEC/EN 61000-6-1:2005                             |                |                |