

# Monitor your photovoltaic system ...safe, efficient and at low cost



**Avoid equipment breakdowns and detect problems early**

**Provides real-time information on the current yield and status of your system**

- Data on voltage, current and temperature of your photovoltaic system
- Data logging- and storage
- Clear visualization of all data
- Clear summary and easy representation of relevant data directly at the device
- Simple evaluation on your computer, smartphone or tablet <sup>1</sup>
- Worldwide remote access and maintenance via GSM or internet <sup>1</sup>
- Automatic notification of faults and user-defined events <sup>1</sup>
- Interact with your system directly through the Internet <sup>1</sup>
- 1 year warranty with service hotline
- Designed and manufactured according to German Industrial Standards in Ecuador

<sup>1</sup> optional

## Technical Specifications

### Input Channels

- 3 x Current ( $\pm 25$  A)
- 3 x Voltage (+ 50 V)
- 3 x Temperature sensors (PT100, PT1000, Ni1000, NTC 5k, LM235Z, KTY81-210)
- 4 x Digital Inputs <sup>1</sup>

### Output Channels

- 1 x LCD Display 4 x 20 characters
- 1 x USB (Micro)
- 1 x UART 5 V
- 4 x Digital Outputs (1 A) - *Smart intelligent Highside Power Switch* <sup>1</sup>
- 2 x Voltage Power Supply (je 12 V / 2 A) <sup>1</sup>
- 1 x Relay 240 VAC / 5 A <sup>1</sup>
- GSM Module <sup>1</sup>
- Bluetooth class 2+EDR up to 50 m range <sup>1</sup>
- Ethernet IEEE 802.3 <sup>1</sup>
- WLAN IEEE 802.11 <sup>1</sup>
- HDMI for HD TVs an monitors with HDMI IN <sup>1</sup>
- RCA composite video connector for analog TV or monitor <sup>1</sup>

*More Input and output channel configurations available on request*

### Housing

- Protection: IP 40 <sup>1</sup>
- Dimensions: 171 mm x 121 mm x 55 mm
- Weight: 500 g
- Connectors: Phoenix Contact MINI COMBICON 3,5 mm

### Power Supply

Input voltage: 5 V .. 30 V DC, approx. 500 mA

### Temperature

- Operating mode : -40 ... + 85 °C
- Display readable: -20 ... + 70 °C

### Memory

- 4 GB SD- Memory card, 100.000 write cycles <sup>1</sup>
- 1000 kByte non-volatile-memory (EEPROM)

### Backup-battery (buffered realtime Clock)

3.6V Lithium Battery Cells CR2032, 45 mAh

### Series measurement

- Scan interval
- Log interval
- Configuration
- Evaluation
- Functions
- Monthly recording in real time calendar
- 1 ... 60 seconds
- 1 ... 9999 scan intervals
- Shift register, subdivided in daily data blocks
- Average, maximum, minimum, standard deviation

<sup>1</sup> optional

### Contact

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