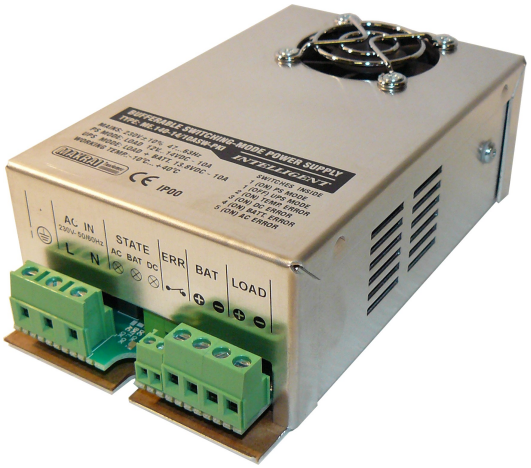
# ME.140-14/10ASW-PKI BUFFERABLE INTELLIGENT II. POWER SUPPLY USER'S MANUAL, 140W-12VDC / 13.8V/DC

WARNING!
Touching of mains connector is dangerous after plug in this device. The device MUST be grounded to reduce risk of electrical shock. Ventilation should be insured for the device at installation.

## 1. *Usage of the device*




The device can be operated either in **UPS** or **PS** power supply mode. Selection of the operating mode is made by a DIP SWC inside. In **UPS** mode the output DC level is 13.8 VDC and cannot be adjusted. In **PS** mode the output level can be adjusted between 12 V – 13.8 VDC. The **STATE** LEDs show the actual operation. The device has **ERROR** output contact which breaks in case of error (See Table A). The type of errors has to be permitted by DIP SWC inside. Choose the appropriate one according to Table B. The device switches off LOAD output if short-circuit or overload occurs. In every 20 s the LOAD output istested.

## 2. *UPS buffered operating mode (default)*

Remove the upper cover of the device by slightly pushing its lower parts. Choose the **UPS** operating mode by a DIP SWC. Connect the output **BAT** to the battery and output **LOAD** to the load. Plug the mains voltage to the input contact **AC IN 230 V 50/60 Hz**. The output voltage is 13.8 VDC at both contacts. In this operating mode the device tests the battery.

## 3. *Operation of deep discharge*

The load is switched off if battery voltage is below 10.5 VDC.
The load is switched on if battery voltage is 12.5 VDC (battery is charged).

## 4. *PS power supply mode*

Choose the **PS** operating mode by a DIP SWC inside. Adjust the output voltage by potentiometer installed inside the device between 12 V – 13.8 VDC. Connect output **LOAD** to the load. Max loading current is 10 A. Plug the mains voltage to the input contact **AC IN 230 V 50/60 Hz**. In this operating mode the battery test and deep discharge function are not in operation.

**Table A**

| LED lights | | LED not light | | Error contact delay |
|---|---|---|---|---|
| Mains OK: | **AC** | No power: | **AC** | 20 s |
| LOAD output OK: | **DC** | No LOAD output: | **DC** | 20 s |
| UPS mode with battery: | **BAT** | Deep discharge protection: | **BAT** | 0 s |
| **LED flashing** | | | | |
| UPS mode without battery: | **BAT** No battery | | | 5 s |
| UPS mode with battery: | **BAT** Change battery | | | 60 s test time |

**Table B**

| Specifications | Protections | DIP SWC settings |
|---|---|---|
| Input: 230 V ±10 % 47 to 63 Hz 1.22 A<br>Insulation class: I.<br>Protection: IP 00<br>Rated power: 140 W<br>Output voltage PS: 12 V to 13.8 VDC<br>Output voltage UPS: 13.8 VDC<br>Load current PS: 10 A<br>Load current UPS: 9.2 A / 8.4 A<br>Charging current UPS: 0.8 A / 1.6 A<br>Recommended battery: 12 V / 7Ah / 12 Ah /18Ah<br>Error contact: max 30 VDC – 100 mA<br>Max ambient temperature: -10 °C… + 40 °C<br>Dimensions: W = 124 D = 78 H = 44 (mm)<br>Weight: 0.3 kg | AC input<br>Mains impulse overvoltage<br><br>DC output<br>Overloading (OLP)<br>Short-circuit (SCP)<br>Overheating (OHP)<br>Overvoltage (OVP)<br>Deep discharge (UVP)<br>Reverse polarity (RCP) | 1 – ON PS Mode<br>OFF UPS Mode<br><br>Choosable error types<br>2 – ON TEMP ERROR<br>3 – ON DC ERROR<br>4 – ON BATT ERROR<br>5 – ON AC ERROR<br>6 – OFF 0.8 A CHARGING<br>ON 1.6 A CURRENT |