# PBN14C Series

60 WATT THREE STEP CHARGER

## FEATURES

- 3-step charge control with timer
- Universal input voltage (90-264 VAC)
- Order mains cord separately
- Mounting bracket available
- Waterproof (IP67) version available
- Approvals:
  - Medically certified (EN 60601)
  - UL approved (UL 60601-1)



## SPECIFICATIONS

| INPUT | | |
|---|---|---|
| Input voltage | 90-264VAC | |
| **OUTPUT** | | |
| Model numbers | PBN14C-12K | PBN14C-24K |
| Output Voltage<br>* Cycle mode<br>* Standby mode | 12V<br>14.7V ±0.2V<br>13.8V ±0.2V | 24V<br>29.5V ±0.2V<br>27.7V ±0.3V |
| Max. output power | 60 W | 60 W |
| Current limit | 4A ±0.3A | 2A ±0.2A |
| Switch frequency | 40khz | |
| Leakage current with mains disconnected | ≤ 200µA | |
| Ripple | ≤100MV p-p | |
| **OPERATING** | | |
| Efficiency (at 100% load) | ≥80 % | |
| Protection | Mains fues<br>Auto, resettable fuse protects the charger against wrong polarity | |
| Insulation class | Class 1 (Class 2 optional) | |
| Indicator 3 colour LED | | |
| * Orange (constant current) | 12V 4A | 24V 2A |
| * Yellow (constant voltage) | 14.7V | 29.5V |
| * Green (constant voltage) | 13.8V | 27.6V |
| Timer | 2H ±30% | |
| Temperature range | -10 – 40 degC | |
| Cooling | Free convection | |

| STANDARDS AND APPROVALS | |
|---|---|
| Electrical safety | EN69601-1, EN60950-1, EN60335-2-29, UL60601-1 |
| EMC standards<br>* Medical<br>* Emission<br>* Immunity | <br>EN 60601-1-2<br>EN 61000-6-3<br>EN 61000-6-1 |
| C-Tick | AS/NZS2064 CISPR11: Group 1, Class A |
| **MECHANICAL** | |
| Dimensions (LxWxH) | 135x80x44mm |
| Weight | 350g |
| Mains connection | IEC320 3-pin connector |
| Output terminals | Battery clips,push-on |
| LED indications for 12V<br>ORANGE | Quick Charge<br>The charger is in constant current mode.<br>Charge current is maximum (4A).<br>The battery capacity is something between 0 and 80%. |
| YELLOW | Absorption Charge<br>The charger is in timer/constant cycle voltage mode.<br>Charge current is less than maximum (<4A).<br>The battery capacity is something between 80 and 90% fully charged when the LED-indicator changed to yellow. |
| GREEN | Float Charge<br>Charge current is normally very low.<br>The battery is 100% fully charged.<br>The charge voltage is at float/standby level (13.8V). |

## SELECTION TABLE

| MODEL NUMBER | NOMINAL OUTPUT VOLTAGE | OUTPUT CURRENT | MAX POWER |
|---|---|---|---|
| PBN14C-12K | 13.8V | 4A | 60W |
| PBN14C-24K | 27.6V | 2A | 60W |