



AC-DC Power Supplies for Radio and Marine Use

PS1308 series Power Supply convert 120V line voltage to 13.7 VDC, allowing a mobile radio to be used as a desktop base station.

This series is available with or without a radio housing. The housing accommodates a wide number of radio brands by just changing the low-cost front panel.

Models and Additional Features

PS1308B: Includes battery charging facility—up to 24Ah, 12V external batteries can be connected to the unit for continuous radio operation during AC power failures. The battery housing mounts below the power supply, which holds two 7Ah batteries.

PS1308SB: Includes battery charging facility, as well as a 2W continuous (4W peak), 40Ω speaker. The speaker offers maximum frequency range in compact 2.5" diameter.

PS1308MS: This specialized version is ideal for marine applications, providing a regulated 13.7 VDC to electronic equipment, including 25W VHF radios. During AC power failures, the PS1308MS automatically transfers the load to the ship's 24 VDC supply via a 24 V to 13.7 V regulator. When the AC power resumes, the unit automatically returns the load to the AC power. All units are CE marked and comply with FCC Class B, EN55022 and EN60945.

24V DC output units are also available.

Common specifications for PS1308 Series Power Supplies

- Input frequency:** 47–65 Hz.
- Output voltage:** 13.7 VDC ± .2 V.
- Load regulation:** ± .2 V.
- Line regulation:** ± .1 V.
- Output ripple:** <50 mV.
- No-load power consumption:** 7 W.
- Input Protection:** 115 V units: 4 A fuse.
230 V units: 2 A fuse.
- Output Protection:**
Constant current limited at:
115% of full load (PS1308);
100% of full load (all others).
- Radio output connector:** 2-way block.
- Operating temperature:** -10 to +55°C.

Power Supply Specifications—PS1308 Series

| Avel P/N | Input Voltage, AC | | Output Current (max.) ⁽¹⁾ | Battery Connection | Weight (Kg / pounds) ⁽⁴⁾ | Dimensions (mm / inches) | | |
|----------|----------------------|----------|--------------------------------------|--------------------|-------------------------------------|--------------------------|-----------|-----------|
| | Nom. | Range | | | | Height ⁽⁵⁾ | Width | Depth |
| PS1308 | 115 V | 85–132 V | 8 A | N / A | 4.5 / 10 | 114 / 4.5 | 190 / 7.5 | 203 / 8.0 |
| PS1308B | 115 V | 85–132 V | 8 A | 2-way block | 4.5 / 10 | 114 / 4.5 | 190 / 7.5 | 203 / 8.0 |
| PS1308SB | 115 V | 85–132 V | 8 A | 2-way block | 4.5 / 10 | 134 / 5.3 | 190 / 7.5 | 203 / 8.0 |
| PS1308MS | 115 V ⁽²⁾ | ± 10% | 7 A ⁽³⁾ | 2-way block | 4.1 / 9 | 69 / 2.7 | 190 / 7.5 | 203 / 8.0 |

(1) At 30°C ambient temperature.
 (2) Input voltage during AC power failure 24 VDC nominal, 18-32 VDC range.
 (3) 15 minutes maximum; 3 ADC continuous.
 (4) Battery housing adds 5.5 Kg / 12 pounds (with two 7 Ah batteries).
 (4) Battery housing adds 76 mm / 3 inches to height.