



**SQ300-12- 60**  
**SQ300-12- 100**  
**SQ300-12- 250**

### FEATURES

- SHELF OR PLUG-BOARD MOUNT
- HIGH OVERLOAD CAPACITY
- BUILT-IN SURGE PROTECTION
- CONSTANT FREQUENCY
- CONFORMS TO AAR RECOMMENDED PRACTICES

### DC – AC SQUARE WAVE INVERTER FOR RAILROAD AND TRANSIT

Behlman's SQ300 Series is a rugged inverter that supplies 120 VAC from a 12 VDC source for continuous operation or standby operation of railroad signal equipment.

The input is from a nominal 13.2 V lead acid or nickel cadmium battery, which should have a low internal impedance. The output is a square wave with a fixed frequency, 60 Hz, 100 Hz or 250 Hz, +/- 1% regardless of load, input voltage or temperature.

The output voltage is proportional to the input voltage and the inverter has a high overload capacity of 110%. The SQ300 can be shelf mounted on supplied rubber feet or plug board mounted with optional bracket.

The inverters are designed to meet the rugged mechanical and environmental requirements of railroad and transit use.

### INPUT

#### Voltage:

12 VDC +/- 20%, approximately 30 amps  
(nominal 13.2 V battery)

### OUTPUT

#### Power:

300 VA

#### Waveform:

Square wave

#### Voltage:

120 VAC +/- 5% isolated and floating. Proportional To input voltage.

#### Current:

2.5 Amps

#### Overload:

110%

#### Frequency:

Constant Frequency +/- 1%

**-60**

60 Hz

**-100**

100 Hz

**-250**

250 Hz

#### Efficiency:

90% typical at full load

### PROTECTIVE CIRCUITS

#### Input:

Fuse with surge arrestor and lightning protection

#### Overload:

Overload fault current electronically limited to protect load... power restored when overload is removed

#### Thermal:

Internal temperature sensor shuts off output to prevent heat damage

## MECHANICAL & ENVIRONMENTAL

**Dimensions:** High-strength shelf-mount chassis with optional plug-board mount  
5"W X 8"H X 9.5"D  
(12.7 cm x 20.3 cm x 24.1 cm)

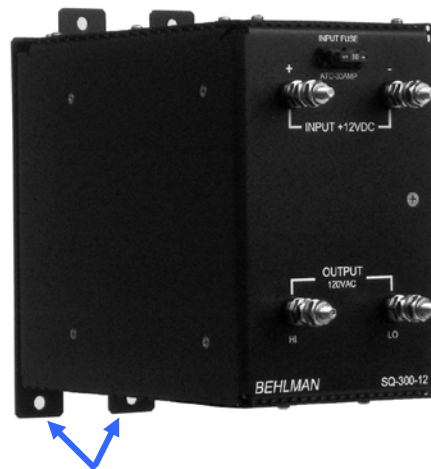
**Weight:** 25 lbs (11.3kgs)

**Input:** AAR terminals on front  
**Output:** AAR terminals on front  
**Operating Temperature:**  
-40° to 160° F  
(-40° to 71° C)

**Humidity:** Up to 95% non-condensing

**OPTIONS:** *Contact factory for additional options*

**PB:** Standard Plug-Board mount with two tabs at top and bottom



*Shown with Option PB*

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