

250-VA DC-AC INVERTER

120-VAC, 60-HZ OUTPUT



Model 1716-48-120-60

Features:

- 12, 24, 48 OR 130 VDC INPUT
- ISOLATED, REGULATED
FREQUENCY-STABLE OUTPUT
- 83%-90% EFFICIENT
- CONVECTION COOLED

Compact and lightweight, the 250 VA Model 1716 dc-to-ac inverter is designed to perform equally well in stationary and mobile applications. The inverter provides an isolated, well regulated 120-Vac, frequency-stable 60-Hz quasi-sine-wave output and is available in 12, 24, 48 and 130-Vdc input versions. The conservatively rated Model 1716 is well suited for powering a variety of loads, from sensitive electronic equipment to small motors and other nonlinear loads.

Table 1

Nominal Input Voltage (Vdc)	Input Voltage Range (Vdc)	Input Current No Load ¹ (A dc)	Input Current Full Load ² (A dc)	Efficiency ²	Model Number
12	10.5-16	0.28	28.6	83%	1716-12-120-60
24	21-29	0.13	13.9	86%	1716-24-120-60
48	42-58	0.07	6.8	88%	1716-48-120-60
130	105-145	0.04	2.7	88%	1716-130-120-60

¹ Typical at no load and nominal input voltage

² Typical at full load and minimum input voltage

FULL SPECIFICATIONS: SEE PAGE 2

Specifications:

INPUT VOLTAGE AND CURRENT	The nominal input voltage, the input voltage range, the no-load input current and the full-load input current are shown in Table 1.
OUTPUT VOLTAGE (VAC)	118 Vac Nominal, single phase (as measured with a conventional average-responding, rms-calibrated voltmeter)
FREQUENCY	60 Hz nominal ± 0.05 Hz maximum variation over the full range of load and input voltage changes. Temperature coefficient is $\pm 0.02\%$ maximum per $^{\circ}\text{C}$
VOLT-AMPERE RATING	250 VA
OUTPUT VOLTAGE REGULATION	$\pm 0.2\%$ versus dc input line $\pm 2.0\%$ versus load
OPERATING TEMPERATURE RANGE	For 24, 48 and 130-Vdc input versions: -30°C to $+50^{\circ}\text{C}$ For 12-Vdc input versions: -30°C to $+30^{\circ}\text{C}$ (for operation up to $+50^{\circ}\text{C}$, derate the output volt-ampere rating linearly to 175 VA)
STORAGE TEMPERATURE RANGE	-40°C to $+95^{\circ}\text{C}$
OUTPUT VOLTAGE WAVE SHAPE	Three-level stepped approximation to a sine wave with peak, average and rms values approximating those of a sine wave.
PROTECTION	Protection against overloads and accidental short-circuit of the output is provided electronically, and recovery is automatic upon removal of the abnormal load. A front-panel circuit breaker in series with the dc input provides protection against accidental reversal of input polarity during installation.
INPUT/OUTPUT CONNECTIONS	DC input connections are provided via a two-part (plug and header) connector. The ac output connection is provided via a NEMA type 5-15R duplex receptacle. A front panel chassis ground connection is provided for use with #8 hardware.
DIMENSIONS IN INCHES (MM)	3.25 (83) high x 7.60 (193) wide x 11.25 (286) deep (excluding flanges and terminal block). Mounting flange on base is 0.6 (15) wide each side.
MOUNTING IN INCHES (MM)	Flange on base accepts six #10 screws. Hole pattern (3 each side) is 3.8 (97) between holes front-to-back and 8.1 (206) wide.
WEIGHT LBS (KG)	8 (3.7)
ACCESSORIES INCLUDED	User information guide, mating connector

Products

For information about other Wilmore dc-to-ac inverters or for information about other power-conditioning products such as dc-to-dc converters, switching power supplies, and custom power solutions, please contact our sales department.

