800 WATT DC-DC CONVERTERS

Model 1800-48-48-16-M3

Features

- Regulated Output Voltage
- Rack Mount, 1U High
- Parallel Capability for More Power and/or Redundancy
- Auxiliary Alarm Contacts
- Option For Remote Monitoring (via SNMP or Web Browser)

Table 1

Input Voltage Range[1] (VDC)	Output Voltage[1] (VDC)	Input Current[2] (ADC)	Output Current (ADC)	Model Number (See Table 2 & Page 3 for additional info)	Availability
21-29 (24 Nominal)	24		30	1800-24-24-30(-M3 or -M5)	COMING SOON
	48	36	16	1800-24-48-16(-M3 or -M5)	AVAILABLE
42-58 (48 Nominal)	24	17.8	30	1800-48-24-30(-M3 or -M5)	AVAILABLE
	48	17.4	16	1800-48-48-16(-M3 or -M5)	AVAILABLE
	130		6	1800-48-130-6(-M3 or -M5)	COMING SOON
105-140 (130 Nominal)	24	6.6	30	1800-130-24-30(-M3 or -M5)	AVAILABLE
	48	6.4	16	1800-130-48-16(-M3 or -M5)	AVAILABLE

[1]Can be connected with a positive or a negative ground due to galvanic isolation between the dc input, dc output, and the chassis.
[2]Typical current at full load, nominal input and output voltages

Table 2

Version	Paralleling Capability	Balanced Load Sharing	Auxiliary Form C Alarm Contacts (Normally Open & Normally Closed)	Remote Monitoring through Ethernet connectivity
1800 (M3 suffix)	✔	✔	✔	
1800 (M5 suffix)	✔	✔	✔	✔

SEE PAGE 3 FOR MODEL NUMBERING INFORMATION

Specifications

INPUT VOLTAGE RANGE (VDC)	See Table 1 on Page 1
INPUT CURRENT (ADC)	See Table 1 on Page 1
OUTPUT VOLTAGE (VDC)	See Table 1 on Page 1
OUTPUT CURRENT (ADC)	See Table 1 on Page 1
OUTPUT VOLTAGE REGULATION[1]	±0.1% versus dc input line; ±0.5% versus load
OUTPUT VOLTAGE RIPPLE AND NOISE[1]	10 millivolts peak-to-peak ripple (typical) 100 millivolts peak-to-peak (typical)
ISOLATION AND GROUNDING	Mutual electrical isolation provided between the input circuit, the output circuit, and chassis ground
PROTECTION	Protection against output overloads and short-circuits is provided electronically; recovery to normal operation is automatic upon removal of the fault. An overvoltage fault will disable the output until input power is cycled for about 10 seconds. Protection against accidental reversal of the dc-input voltage polarity IS provided by a shunt diode working in conjunction with the front-panel circuit breaker.
EFFICIENCY[1]	92%-84%, depending upon specific model.
HEAT DISSIPATION (AT FULL LOAD)	320 to 460 BTU/hour, depending upon specific model.
AMBIENT TEMPERATURE RANGE	Operating: -30° C to +55° C (internal fan cooling) Storage: -40° C to +95° C
FRONT-PANEL CONTROLS	Combination circuit breaker and ON/OFF switch provided for dc-input power.
FRONT-PANEL INDICATORS	A voltmeter and ammeter display the dc output.
REAR-PANEL OUTPUT STATUS INDICATOR	Auxiliary Form C contacts (i.e. both Normally Open and Normally Closed) indicate improper converter output; provided through a two-part (header and plug) wire-clamp connector
I/O POWER CONNECTIONS	Provided through two-part (header and plug) wire-clamp connectors. A connection to chassis ground is provided for use with #8 hardware.
PARALLELING CAPABILITY	Integral output paralleling diode and balanced load sharing for paralleling two or more converters for additonal power and/or redundancy
NETWORK COMMUNICATIONS INTERFACE OPTION (M5 Version only)	Remote monitoring of converter metrics, including input voltage, output voltage, load current, and output power. Data may be obtained through SNMPv.1 and/or onboard web interface, web service API, or USB serial interface. There are no control functions remotely.
DIMENSIONS INCHES (MM)	17.0 (432)W x 1.72 (44)H x 12.3 (312)D, excluding mounting brackets and front panel features. See Figure 1.
WEIGHT LBS (KG)	Approximately 13 (6)
ACCESSORIES INCLUDED	Mating connectors, mounting brackets for 19-inch rack mounting (flush mounting or 5-inch front offset mounting); mounting brackets for 23-inch rack mounting are available upon request; and Ethernet & USB cables (for M5 version)

[1] Some options may affect voltage regulation, ripple and noise, and efficiency specifications.

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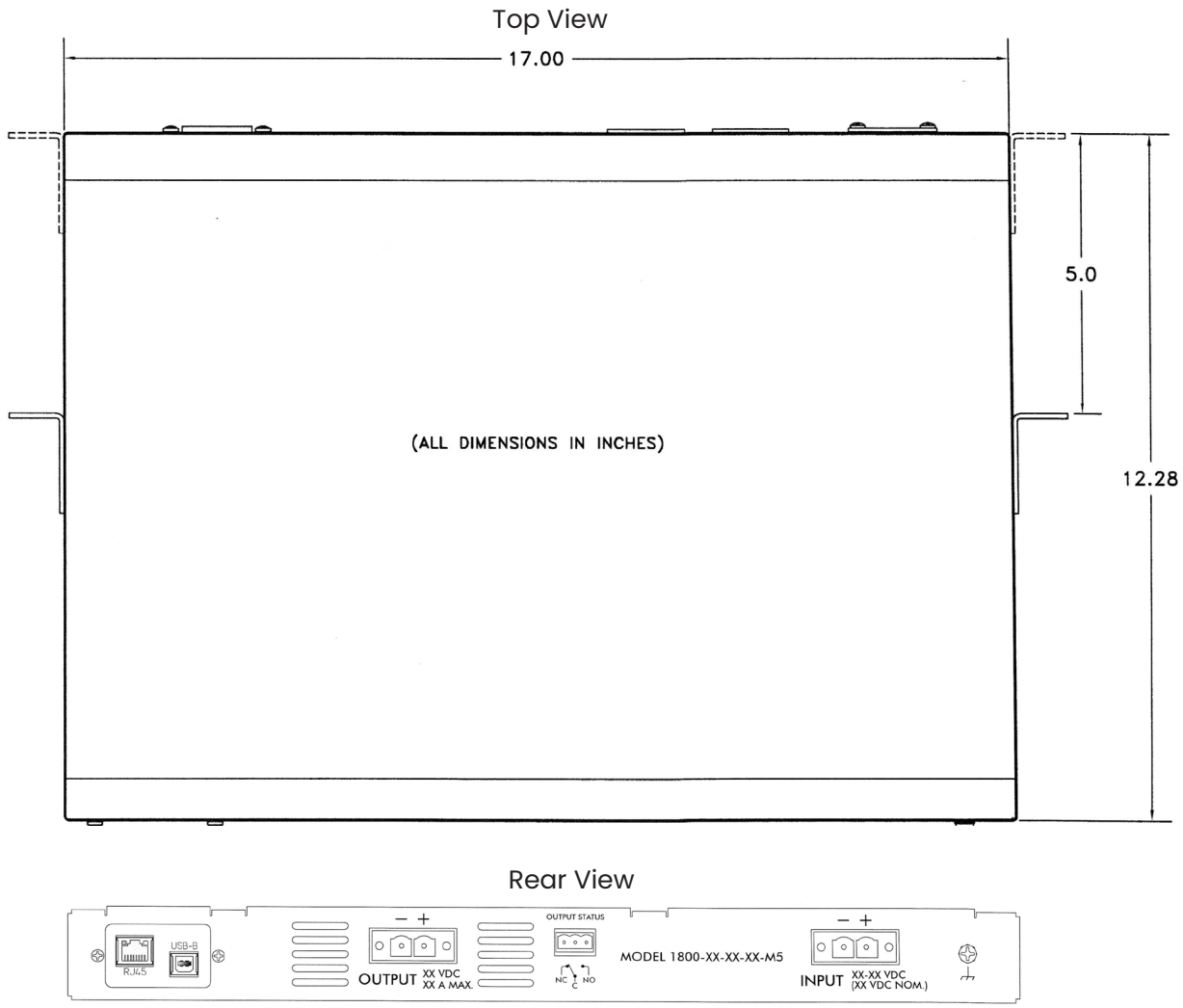
Figure 1
Model 1800-48-48-16-M5



Model Numbering Information

MODEL NUMBERING SEQUENCE	
1800 - 48 - 24 - 30 - M3 1 2 3 4 5	1. Series 1800 2. Input Voltage (See Table 1) 3. Output Voltage (See Table 1) 4. Output Current (Maximum Amperes-See Table 1) 5. M5 if remote monitoring is needed, or M3 if not (See Table 2)

Products

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

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