

1600 WATT DC-DC CONVERTERS

Features

- Regulated Output Voltage
- Parallel Capability for More Power and/or Redundancy
- Rack Mount, 2U High
- Option for Remote Monitoring (via SNMP or Web browser)
- Auxiliary Alarm Contacts



Model 1801-130-48-32-M3

Table 1

Input Voltage Range ¹ (VDC)	Output Voltage ¹ (VDC)	Input Current ² (ADC)	Output Current (ADC)	Model Number (See Table 2 for additional information)	Availability
21-29 (24 Nominal)	24		60	1801-24-24-60-M3 (or -M5)	COMING SOON
	48		32	1801-24-48-32-M3 (or -M5)	COMING SOON
42-58 (48 Nominal)	24		60	1801-48-24-60-M3 (or -M5)	COMING SOON
	48	35.8	32	1801-48-48-32-M3 (or -M5)	AVAILABLE
	130		12	1801-48-130-12-M3 (or -M5)	COMING SOON
105-140 (130 Nominal)	24		60	1801-130-24-60-M3 (or -M5)	COMING SOON
	48	13.2	32	1801-130-48-32-M3 (or -M5)	AVAILABLE

¹Can be connected with a positive or a negative ground due to galvanic isolation between the dc input, dc output, and the chassis.

²Typical 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
1801 (M3 suffix)	✓	✓	✓	
1801 (M5 suffix)	✓	✓	✓	✓

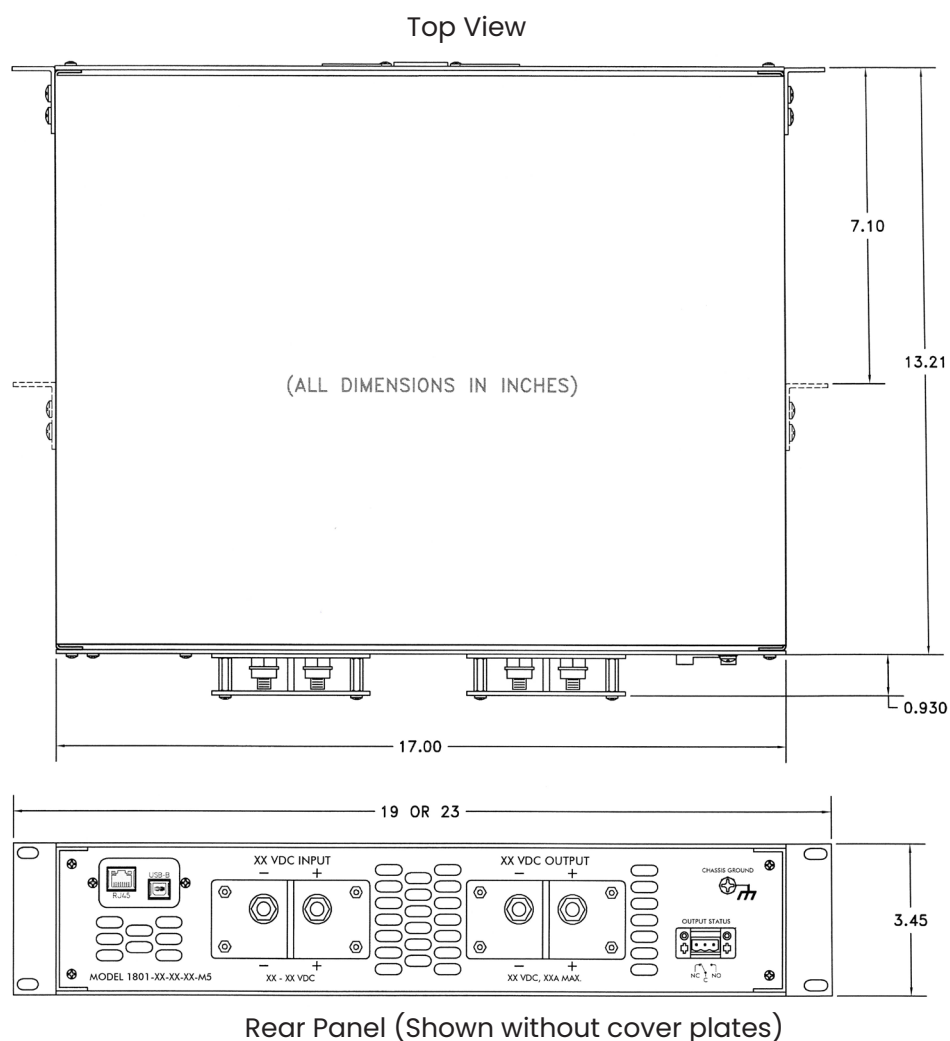
SEE PAGE 3 FOR MODEL NUMBERING INFORMATION

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	25 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	Reaches 90% at approximately 37% of full load and remains above 90% for most of the load range.
HEAT DISSIPATION (AT FULL LOAD)	Approximately 550 BTU/hour.
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
PARALLELING CAPABILITY	Integral output paralleling diode and balanced load sharing for paralleling two or more converters for additional 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.
I/O POWER CONNECTIONS	Provided through 5/16" threaded studs. A connection to chassis ground is provided for use with #10 hardware.
DIMENSIONS INCHES (MM)	17.0 (432)W x 3.45 (88)H x 13.2 (337)D, excluding mounting brackets and front panel features. See Figure 1.
WEIGHT LBS (KG)	Approximately 20 (10)
ACCESSORIES INCLUDED	Mating connector for auxiliary Form C contacts, mounting brackets for 19-inch rack mounting (flush mounting or 5.09-inch front offset mounting); mounting brackets for 23-inch rack mounting are available upon request; and Ethernet & USB cables (for M5 version).

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

Figure 1
Model 1801-130-48-32-M5



Model Numbering Information

MODEL NUMBERING SEQUENCE	
1801 - 130 - 48 - 32 - M3	
1 2 3 4 5	
	1. Series 1801 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.