



130-to-48 volt DC-to-DC Converter



SERIES 1605XT 800 WATT DC-TO-DC CONVERTER

- 800 WATT (16-AMPERE) OUTPUT
- HEIGHT 1.75" (1U RACK SPACE)
- CONVECTION COOLED
- REGULATED, ADJUSTABLE OUTPUT VOLTAGE
- 90% EFFICIENCY
- OPTIONAL REMOTE MONITORING CAPABILITY VIA SNMP/WEB BROWSER
- ENGINEERED & MANUFACTURED IN USA

SPECIFICATIONS	• ENGINEERED & MANUFACTURED IN USA
INPUT VOLTAGE RANGE (VDC) ¹	90 to 160 (130 nominal)
INPUT CURRENT (ADC)	6.4 typical at full load, nominal input and output voltages (approximately 70 milliamperes at no load)
OUTPUT VOLTAGE ADJUSTABILITY RANGE (VDC) ¹	44 to 52 (48 nominal)
OUTPUT CURRENT (ADC)/POWER (W)	16 (continuous duty)/ 800
OUTPUT VOLTAGE REGULATION	±0.1% versus dc input line; ±0.5% versus load
OUTPUT VOLTAGE RIPPLE	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 dc-input voltage polarity provided by front-panel circuit breaker
EFFICIENCY	Reaches 90% at approximately 30% of full load and remains above 90% for most of the load range
AMBIENT TEMPERATURE RANGE	Operating: -30° C to +50° C (convection cooling) Storage: -40° C to +95° C
FRONT-PANEL CONTROLS	Combination circuit breaker and ON/OFF switch provided for dc-input power. A potentiometer shaft with locking nut provided to adjust output voltage.
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
AVAILABLE OPTIONS ²	Output paralleling diode • Output load sharing • Remote status monitoring via SNMP and web browser (See page two for additional information.)
I/O POWER & OUTPUT STATUS CONNECTIONS	Provided through two-part (header and plug) wire-clamp connectors.
DIMENSIONS INCHES (MM)	17.0 (432)W x 1.72 (44)H x 14.8 (376)D, excluding mounting brackets and front panel features
WEIGHT LBS (KG)	Approximately 12 (5.5)
ACCESSORIES INCLUDED	Mating connectors, user information guide, mounting brackets for 19-inch and 23-inch rack mounting (flush mounting or 5-inch front offset mounting), and Ethernet cable & USB cable (for M4 and M5 versions)

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

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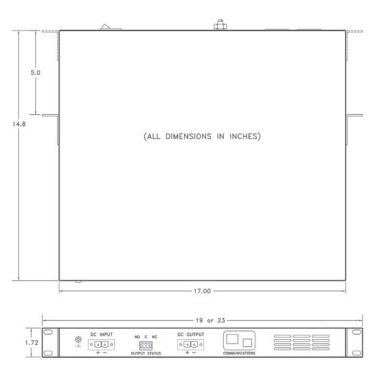
² Some options may affect voltage regulation, ripple and noise, and efficiency specifications.

Wilmore



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Options are available for paralleling two or more converters for redundancy and/or additional power, and for adding ethernet connectivity. To achieve paralleling, either the M3 or M5 versions described below is recommended. Ethernet connectivity allows for remote monitoring of various metrics of the converter, such as input voltage, output voltage, output load current, and more. This information can be accessed through the onboard web interface, web service API, USB serial interface, and also using SNMP.



TOP VIEW

REAR VIEW OF M5 VERSION

AVAILABLE OPTIONS:

M3 VERSION	The suffix M3 designates a converter with a paralleling diode and balanced load sharing capability.
M4 VERSION	The suffix M4 designates a standard converter (without the features of M3 above) with added ethernet connectivity.
M5 VERSION	The suffix M5 designates a converter with paralleling diode, balanced load sharing capability, and ethernet connectivity.

MODEL NUMBERING INFORMATION

- 1. Series 1605XT
- 2. Input Voltage (130Vdc nominal)
- 3. Output Voltage (48Vdc nominal)
- 4. Output Current (16A maximum)
- Option (M3, M4, M5) or leave blank if standard version with no option is needed

OTHER WILMORE 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.

Information provided in this bulletin is subject to change without notice.

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