



ISO 9001
REGISTERED



Universal Desk-Top Single-Output Models up to 100 Watts

Part Number Ordering System (See Page 33)
Input/Output Plug/Cord Options (See Page 22)



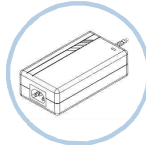
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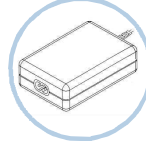
UNIVERSAL INPUT: 90~264VAC, 47~63 HZ

CLASS I
(PROTECTIVE GROUND):

CLASS II
(DOUBLE-INSULATED):



GTM3D(T)100P-(L)
141.5L x 76W x 43H



GTM3D(T)100P-(L)W
141.5L x 76W x 43H

DUAL VOLTAGE OUTPUT MODELS

MODEL NUMBER	**OUTPUT VOLTAGE	* OUTPUT CURRENT	***RATED OUTPUT POWER
GTM3D100P21D(W)	+5 V, +12 V	0 - 12 A 0 - 3 A	95 WATTS
GTM3D100P25D(W)	+5 V, +12 V	0 - 3 A 0 - 5A	75 WATTS
GTM3D100P23D(W)	+3.3 V, +12 V	0 - 12 A 0 - 3 A	75 WATTS
GTM3D100P26D(W)	+3.3 V, +12 V	0 - 3 A 0 - 5 A	70 WATTS
GTM3D100P22D(W)	+5 V, +15 V	0 - 12 A 0 - 2.4 A	95 WATTS
GTM3D100P24D(W)	+3.3 V, +15 V	0 - 12 A 0 - 2.4 A	75 WATTS
GTM3D100P21LD(W)	+3.3 V, +5 V	0 - 10 A 0 - 10 A	80 WATTS

TRIPLE OUTPUT VOLTAGE MODELS

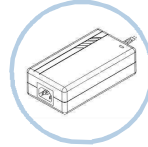
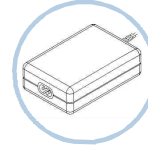
MODEL NUMBER	**OUTPUT VOLTAGE	* OUTPUT CURRENT	***RATED OUTPUT POWER
GTM3T100P31D(W)	+5 V, +12 V, -12 V	0 - 12 A 0 - 3 A 0 - 0.5 A	100 WATTS
GTM3T100P32D(W)	+5 V, +15 V, -15 V	0 - 12 A 0 - 2.4 A 0 - 0.5 A	100 WATTS
GTM3T100P33D(W)	+3.3 V, +12 V, -12 V	0 - 12 A 0 - 3 A 0 - 0.5 A	85 WATTS
GTM3T100P34D(W)	+3.3 V, +15 V, -15 V	0 - 12 A 0 - 2.4 A 0 - 0.5 A	85 WATTS



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REGISTERED**Universal Desk-Top Single-Output Models up to 100 Watts**Part Number Ordering System (See Page 33)
Input/Output Plug/Cord Options (See Page 22)

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UNIVERSAL INPUT: 90~264VAC, 47~63 HZ

CLASS I (PROTECTIVE GROUND):
(W) MULTI-OUTPUT MODELCLASS II (DOUBLE-INSULATED):
(W) MULTI-OUTPUT MODELGTM3T100P-L
141.5L x 76W x 43HGTM3T100P-LW
141.5L x 76W x 43H**TRIPLE OUTPUT VOLTAGE MODELS**

MODEL NUMBER	*OUTPUT VOLTAGE	* OUTPUT CURRENT	***RATED OUTPUT POWER
GTM3T100P31LD(W)	+3.3 V,	0 - 10 A	85 WATTS
	+5 V	0 - 10 A	
	+12 V	0 - 0.5 A	
GTM3T100P32LD(W)	+3.3 V,	0 - 10 A	85 WATTS
	+5 V	0 - 10 A	
	-12 V	0 - 0.5 A	
GTM3T100P33LD(W)	+3.3 V,	0 - 10 A	85 WATTS
	+5 V	0 - 10 A	
	+15 V	0 - 0.5 A	
GTM3T100P34LD(W)	+3.3 V,	0 - 10 A	85 WATTS
	+5 V	0 - 10 A	
	-15 V	0 - 0.5 A	
GTM3T100P35LD(W)	+3.3 V,	0 - 3 A	85 WATTS
	+5 V,	0 - 3 A	
	+12 V	0 - 5 A	

- * Each output current can vary within its designated range, as long as the rated output power is not exceeded.
 ** Single output units are available from 3.0 V up to 48 V in 0.1 V increments.
 -X.X: optional for specifying output voltage deviation from standard model, subtracting X.X Volts from standard output voltage.
 *** Watts rating for informational purposes, only. May or may not be provided on label.
 ****Remote Sensing Option provides regulation within +/-2% of Nominal Voltage for Main Output.
 For 3.3V Single-Output or 3.3V Main of Multi-Output Models, Remote Sensing is required.

Model Number Code:

GT-2,3: Internal Code; M: Medical Model, UL 2601-1qualified;
 Wall Plug-In Single-Output Models: 21089; Power/Output-Voltage: 1303 to 1948; Wall Plug-In: W; Class I: 3,
 Class II: 2; Input Plug: N.A. -, Euro.: E, British: U, Australia: A.

Desk-Top Single-Output Class I Models:

GTM21089; Power/Output-Voltage: 1303 to 1948; Desk-Top: T; Class I: 3;
 GTM21097; Power/Output-Voltage: 2003 to 5048;
 GTM21131; Power/Output-Voltage: 3303 to 7248;
 GTMS100P: Single/100W/P.F. Corrected; 3.3 to 48: Output Voltage; D: Desk-Top;

Desk-Top Single-Output Class II Models:

GTM21089; Power/Output-Voltage: 1303 to 1948; Desk-Top: T; Class II: 2;
 GTM21148; Power/Output-Voltage: 1703 to 3048;
 GTM22011; Power/Output-Voltage: 2203 to 6048;
 GTMS100P: Single/100W/P.F. Corrected; 3.3 to 48: Output Voltage; D: Desk-Top; W: Class II;

Desk-Top Multi-Output Class I and II Models:

GTMD100P: Dual/100W/P.F. Corrected; 21, 21L to 26: Model Designation; D: Desk-Top; -: Class I / W: Class II;
 GTMT100P: Triple/100W/P.F. Corrected; 31, 31L to 34, 35L: Model Designation; D: Desk-Top; -: Class I / W: Class II



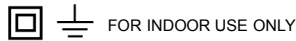


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Desk-Top and Wall Plug-in Single and Multi-Output Models, up to 100 Watt

Part Number Ordering System (See Page 33)
Input/Output Plug/Cord Options (See Page 22)



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GENERAL SPECIFICATIONS

Electrical Specifications:

Input Voltage/ Line Frequency:

Universal 90VAC to 264VAC, 47Hz-63Hz, for All Models.

Input Current:

Less than 2 Amps for 100 Watt Models

Output Voltage:

Single-Output Units: 3.0V up to 48V in 0.1V increments. Multi-Output Units: Dual, Triple and Triple-Low for 100W Series. See Rating Table.

Rated Output Power:

See Rating Table. Watts rating for informational purposes, only. May or may not be provided on label.

Output Current:

Single-Output Units: No Load to Full Load, No minimum load required; Multi-Output Units: 10% Min. Load required on Main Output to maintain specified regulation. Each output current can vary within its designated range, as long as the rated output power is not exceeded.

Output Ripple & Noise (Peak to Peak):

1% or 100mVmax., whichever is smaller; except for +3.3V out. Models which are 50mVmax; 20MHz measurement bandwidth.

Output Regulation (Line/Load):

Single-Output Units: $\pm 5\%$ (including cord), measured at the end of output connector; Multi-Output Units: $\pm 5\%$ for Main Output, $\pm 5\%$ for Second Output and $\pm 10\%$ for Third Output (including cord) measured at the end of output connector; for selection please refer to Adaptor Output Plug/Cord options.

Remote Sense (Option):

Provides Regulation within $\pm 2\%$ of nominal voltage of Main Output. For 3.3V Single-Output or 3.3V Main of Multi-Output Models, Remote Sensing is required.

Temperature Coefficient:

$\pm 0.04\%/^{\circ}\text{C}$ typical.

Turn-On/ Turn-Off Overshoot:

5%max. for All Models.

Transient response:

0.5msec. for 50% load change, typical.

Turn-On Delay:

0.5 seconds maximum for All Models.

Hold-Up Time:

20msec.min. at nominal input line (120VAC) for All Models.

Inrush Current:

Less than 20Amps.peak for North American/Japan Models; Less than 40Amps.peak for Euro./U.K./Australia and Universal Models at Cold Start.

Efficiency:

75% typical at Full Load; 85% typ. for 100 Watts Series.

Topology:

Off-Line Isolated Flyback Converter.

Switching Frequency:

100KHz typical.

Over-Voltage Protection:

Basic Protection limits the Output Voltage below 130% of the nominal voltage. Other Options: A) Shut down without latching. The unit will shut down when over-voltage protection is activated at 130% of the nominal value, and automatically recovers when the fault is removed. B) Shut down and latched. The unit will shut down when over-voltage protection is activated at 130% of the nominal value, and remains shutdown even after fault is removed. The unit can only be reset by cycling the input power.

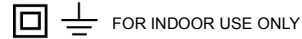
Over-Current/ Short-Circuit Protection:

Hiccup, Automatic Recovery for All Models.

Other Protections:

Input Fusing, Thermal Shutdown.



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REGISTERED**Desk-Top and Wall Plug-In, Single and Multi-Output Models, up to 100 Watts.**Part Number Ordering System (See Page 33)
Input/Output Plug/Cord Options (See Page 22)**Safety Approvals:****Medical Models Class I and Class II (BF Type):**

Recognized (UR) to UL2601-1, C-UR to CSA-C22.2#601, VDE and TUV to EN60601.

ITE Models Basic and Reinforced Insulation:

Listed (UL) to UL60950, C-UL to CSA-C22.2 #950, VDE and TUV to EN60950

Dielectric Withstand:4000VAC, 5650VDC Input-Output (Class II, Double-Insulated) or 1500VAC, 2150VDC Input-Output (Class I, Grounded Applications);
1500VAC, 2150VDC Input-Ground/ 500VAC, 705VDC Output-Ground (Option).**Spacing:**

8mm primary - secondary.

Leakage and Patient Auxiliary Current:

Less than 0.100mA.

Line Surge:

EN61000-4-5 Level 4.

EMI:

Complies with EN55022, EN55011 Class B and FCC Part 15 Class B, when tested with a resistive load, both conducted and radiated.

CE Mark:

Tested to comply with EN50082-1 including EN61000-4-2, EN61000-3-2 (PFC functional module for 100W series), EN61000-3-3, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-11, Level 4. Unit is eligible for CE Mark.

MTBF:

Greater than 50,000 Hours Calculated, Stress Analysis, Ground Fix Environment.

Operating Temperature:

0°C to 40°C, 50% Output Power at 70°C ambient, linearly derated.

Humidity:

0% to 95% Relative Humidity, Non-Condensing.

Storage Temperature:

-40°C to 80°C.

Altitude:

0 - 10,000 feet.

Cooling:

Thermal Conduction

Mechanical Specifications:**Enclosure:**

Upper/Lower Housing, High Impact Plastic, 94V0 Polycarbonate, Non-Vented, Color Black. For Case Dimensions please refer to Rating Table.

Note: For Japanese models add "J" after GT-2,4 of the Model Number.

Input Plug Configuration:

Please refer to Accessories, Output Plug/Cord Options.

Class II Models Standard:Desk-Top Units: EN60 320/C18/2 Pins or EN60 320/C8 (non-polarized shaver) AC Power Receptacle with Male Prongs, Color Black;
Wall Plug-In Units: North America., 2 Prong NEMA 1-15P, Blade Code:01. Europe, 2 Prong EUROPLUG, Blade Code: 07. British (U.K.), 3 Prong/ 1 insulated, Blade Code: 09X. Australia, 2 Prong, Blade Code: 05.**Class I Models Standard:**

Desk-Top Units: EN60 320/C14/3 Pins AC Power Receptacle with male Prongs, Color Black; Wall Plug-In Units: North America, 3 Prong NEMA 5-15P, Blade Code: 02. Europe, 2 Prong w/Ground, SCHUKO, Blade Code: 08. British (U.K.), 3 Prong, Blade Code: 09X. Australia, 3 Prong, Blade Code: 06A.

Note: Ground Wire, 18AWG Stranded Green with Yellow Stripe is connected between ground lug and common of Y Safety Capacitors, Internally.

Output Cord and Connector:

Standard, 2 conductors, 18AWG stranded wire, flat UL VW-1 rated SPT-1 cord type, color black, length of cord: 72 ± 2 in. Cord is measured from the housing to the end of overmold of connector.. Cable is to be marked with wire gauge, and all applicable ratings and safety approvals.

Standard Connector:

Straight female barrel 5.5x2.5x11mm with Center Positive.

For other output cords please refer to Accessories, Output Plug/Cord Options. Custom output cords, connectors and shielding are available.

