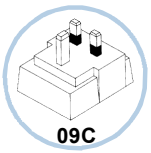
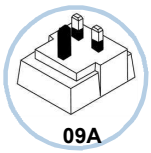
ISO 9001
REGISTERED

Wall plug-in Single-Output Models up to 20 Watts for U.K.; Australia

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

BRITISH (U.K.)

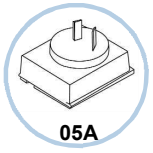
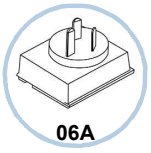
UNIVERSAL INPUT: 90~264VAC, 47~63 HZ

	CLASS II: -W2U (DOUBLE - INSULATED)	CLASS I: - W3U (PROTECTIVE GROUND)
	 09C	 09A
FOR INDOOR USE ONLY	GTM-21089-W2U 74L x 49W x 40.5H	GTM-21089-W3U 74L x 49W x 40.5H

**MODEL NUMBER	****OUTPUT VOLTAGE	* OUTPUT CURRENT	***RATED OUTPUT POWER
GTM21089-1303-W2U,3U-X.X	3.3 V	0 - 2.6 A	18.5 WATTS
GTM21089-1305-W2U,3U-X.X	5.0 V	0 - 2.6 A	13 WATTS
GTM21089-1506-W2U,3U-X.X	6.0 V	0 - 2.5 A	15 WATTS
GTM21089-1509-W2U,3U-X.X	9.0 V	0 - 1.7 A	15.3 WATTS
GTM21089-1512-W2U,3U-X.X	12.0 V	0 - 1.25 A	15 WATTS
GTM21089-1815-W2U,3U-X.X	15.0 V	0 - 1.2 A	18 WATTS
GTM21089-1818-W2U,3U-X.X	18.0 V	0 - 1.0 A	18 WATTS
GTM21089-1824-W2U,3U-X.X	24.0 V	0 - 0.75 A	18 WATTS
GTM21089-1948-W2U,3U-X.X	48.0 V	0 - 0.4 A	19 WATTS

AUSTRALIA

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

	CLASS II: -W2A (DOUBLE - INSULATED)	CLASS I: -W3A (PROTECTIVE GROUND)
	 05A	 06A
	GTM-21089-W2A 74L x 49W x 40.5H	GTM-21089-W3A 74L x 49W x 40.5H

**MODEL NUMBER	****OUTPUT VOLTAGE	* OUTPUT CURRENT	***RATED OUTPUT POWER
GTM21089-1303-W2A,3A-X.X	3.3 V	0 - 2.6 A	8.5 WATTS
GTM21089-1305-W2A,3A-X.X	5.0 V	0 - 2.6 A	13 WATTS
GTM21089-1506-W2A,3A-X.X	6.0 V	0 - 2.5 A	15 WATTS
GTM21089-1509-W2A,3A-X.X	9.0 V	0 - 1.7 A	15.3 WATTS
GTM21089-1512-W2A,3A-X.X	12.0 V	0 - 1.25 A	15 WATTS
GTM21089-1815-W2A,3A-X.X	15.0 V	0 - 1.2 A	18 WATTS
GTM21089-1818-W2A,3A-X.X	18.0 V	0 - 1.0 A	18 WATTS
GTM21089-1824-W2A,3A-X.X	24.0 V	0 - 0.75 A	18 WATTS
GTM21089-1948-W2A,3A-X.X	48.0 V	0 - 0.4 A	19 WATTS





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)

FOR INDOOR USE ONLY

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: ±5% (including cord), measured at the end of output connector; Multi-Output Units: ±5% for Main Output, ±5% for Second Output and ±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 ±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:
±0.04%/°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.

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)

FOR INDOOR USE ONLY

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 Recepticle 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.