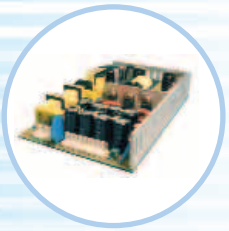
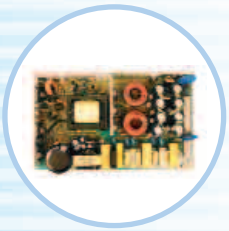
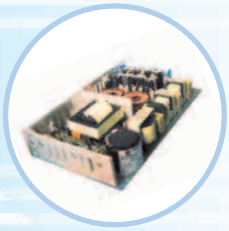
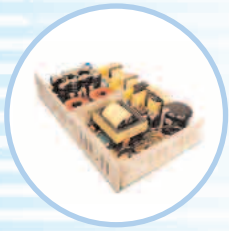
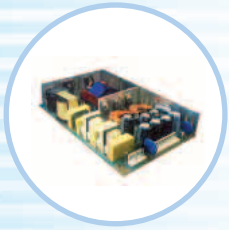
ISO 9001
REGISTERED

Open-Frame Single-Quad w/Active PFC (0.98min)
175-200 Watt

O/P	OPEN-FRAME MODEL NUMBER	OPTION: PCB MOUNT MODEL NUMBER	OUTPUT VOLTAGE	*OUTPUT CURRENT	***RATED OUTPUT POWER
	Universal Input: 90 ~ 264VAC, 47 ~ 63Hz				
** SINGLE	GT(M)3S200P3.3F-X.X(W)	GT(M)3S200P3.3B-X.X(W)	+3.3V	0 -36A	120 WATTS
	GT(M)3S200P5F-X.X(W)	GT(M)3S200P5B-X.X(W)	+5V	0 - 36A	180 WATTS
	GT(M)3S200P9F-X.X(W)	GT(M)3S200P9B-X.X(W)	+9V	0 - 20A	180 WATTS
	GT(M)3S200P12F-X.X(W)	GT(M)3S200P12B-X.X(W)	+12V	0 - 17A	200 WATTS
	GT(M)3S200P15F-X.X(W)	GT(M)3S200P15B-X.X(W)	+15V	0 - 13A	200 WATTS
	GT(M)3S200P18F-X.X(W)	GT(M)3S200P18B-X.X(W)	+18V	0 - 11A	200 WATTS
	GT(M)3S200P24F-X.X(W)	GT(M)3S200P24B-X.X(W)	+24V	0 - 8.3A	200 WATTS
	GT(M)3S200P48F-X.X(W)	GT(M)3S200P48B-X.X(W)	+48V	0 - 4.2A	200 WATTS
DUAL	GT(M)3D200P21F(W)	GT(M)3D200P21B(W)	+5V -5V	0 - 15A 0 - 8A	115 WATTS
	GT(M)3D200P27F(W)	GT(M)3D200P27B(W)	+5V +12 V	0 - 8A 0 - 6A	115 WATTS
	GT(M)3D200P28F(W)	GT(M)3D200P28B(W)	+5V +15V	0 - 8A 0 - 6 A	130 WATTS
	GT(M)3D200P25F(W)	GT(M)3D200P25B(W)	+5V +24V	0 - 5A 0 - 6A	170 WATTS
TRIPLE	GT(M)3D200P21LF(W)	GT(M)3D200P21LB(W)	+3.3V + 5V	0 -15A 0 - 8A	90 WATTS
	GT(M)3T200P31F(W)	GT(M)3T200P31B(W)	+5V -5V, +12V	0 - 15A 0 - 8A 0 - 2A	145 WATTS
	GT(M)3T200P32F(W)	GT(M)3T200P32B(W)	+5V -5V, +15V	0 -15A 0 - 8A 0 - 2A	145 WATTS
	GT(M)3T200P35F(W)	GT(M)3T200P35B(W)	+5 V +24V -12 V	0 - 8A 0 - 6A 0 - 2A	200 WATTS
	GT(M)3T200P36F(W)	GT(M)3T200P36B(W)	+5V +24V -15 V	0 - 8A 0 - 6A 0 - 2A	200 WATTS
	GT(M)3T200P37F(W)	GT(M)3T200P37B(W)	+5V, +12 V -12 V	0 - 8A 0 - 6A 0 - 2A	160 WATTS
	GT(M)3T200P38F(W)	GT(M)3T200P38B(W)	+5V +15V -15 V	0 - 8A 0 - 6A 0 - 2A	160 WATTS

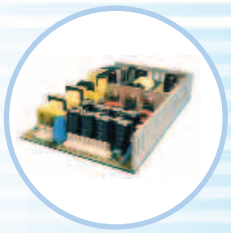
* Each output current can vary within its designated range, as long as the rated output power is not exceeded.

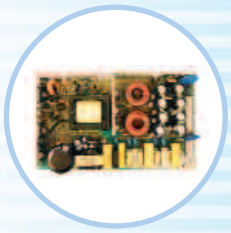
** Single output units are available from 3.3 V up to 48 V in 0.1 V increments.
-X.X: optional, for specifying output voltage deviation from standard model, subtracting X.X Volts from standard output voltage.

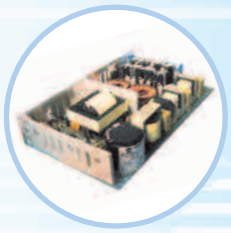
*** Power rating is for informational purposes only and may or may not be provided on label.

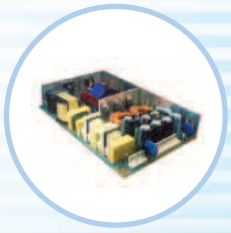
Model Number Code:

GT-3: Internal Code; -: ITE Model or **(M)**: Medical Model; **S:** Single Output or **D:** Dual Output or **T:** Triple Output or **Q:** Quad Output; **200P:** 200W with Power Factor Correction; **3.3 to 48:** Single Voltage or **21 to 28:** Dual Voltage or **21L:** Dual Low Voltage or **31 to 38:** Triple Voltage or **31L to 34L:** Triple Low Voltage or **41 to 48:** Quad Voltage or **45L to 46L:** Quad Low Voltage; **F:** Open-Frame or **B:** PCB Mount; **(W):** Class II Equipment.









Open-Frame Single-Quad w/Active PFC (0.98min)
175-200 Watt

Universal Input: 90 ~ 264 VAC, 47 ~ 63Hz					
O/P	**OPEN-FRAME MODEL NUMBER**	**OPTION: PCB MOUNT MODEL NUMBER**	**OUTPUT VOLTAGE**	***OUTPUT CURRENT**	****RATED OUTPUT POWER**
TRIPLE LOW VOLT.	GT(M)3T200P31LF(W)	GT(M)3T200P31LB(W)	+3.3V +5V +12V	0 - 15A 0 - 8A 0 - 2A	120 WATTS
	GT(M)3T200P32LF(W)	GT(M)3T200P32LB(W)	+3.3V +5V -12V	0 - 15A 0 - 8A 0 - 2A	120 WATTS
	GT(M)3T200P33LF(W)	GT(M)3T200P33LB(W)	+3.3V +5V +15V	0 - 15A 0 - 8A 0 - 2A	120 WATTS
	GT(M)3T200P34LF(W)	GT(M)3T200P34LB(W)	+3.3 V +5 V -15V	0 - 15A 0 - 8A 0 - 2A	120 WATTS
Q U A D	GT(M)3Q200P41F(W)	GT(M)3Q200P41B(W)	+5V -5V +12V -12V	0 - 15A 0 - 8A 0 - 2A 0 - 2A	175 WATTS
	GT(M)3Q200P42F(W)	GT(M)3Q200P42B(W)	+5V -5V +15V -15V	0 - 15A 0 - 8A 0 - 2A 0 - 2A	175 WATTS
	GT(M)3Q200P45F(W)	GT(M)3Q200P45B(W)	+5V +24V +12V -12V	0 - 5A 0 - 6A 0 - 2A 0 - 2A	200 WATTS
	GT(M)3Q200P46F(W)	GT(M)3Q200P46B(W)	+5V +24V +15V -15V		200 WATTS
	GT(M)3Q200P47F(W)	GT(M)3Q200P47B(W)	+5V +12V +24V -12V	0 - 8A 0 - 6A 0 - 2A 0 - 2A	185 WATTS
	GT(M)3Q200P48F(W)	GT(M)3Q200P48B(W)	+5V +15V +24V -15V	0 - 8A 0 - 6A 0 - 2A 0 - 2A	185 WATTS
QUAD LOW VOLT.	GT(M)3Q200P45LF(W)	GT(M)3Q200P45LB(W)	+3.3V +5V +12V -12V	0 - 15A 0 - 8A 0 - 2A 0 - 2A	150 WATTS
	GT(M)3Q200P44LF(W)	GT(M)3Q200P44LB(W)	+3.3V +5V +15V -15V	0 - 15A 0 - 8A 0 - 2A 0 - 2A	150 WATTS

* 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 3.3 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.

*** Power rating is for informational purposes only and may or may not be provided on label.

Model Number Code:

GT-3: Internal Code; -: ITE Model or **(M)**: Medical Model; **S:** Single Output or **D:** Dual Output or **T:** Triple Output or **Q:** Quad Output; **200P:** 200W with Power Factor Correction; **3.3 to 48:** Single Voltage or **21 to 28:** Dual Voltage or **21L:** Dual Low Voltage or **31 to 38:** Triple Voltage or **31L to 34L:** Triple Low Voltage or **41 to 48:** Quad Voltage or **45L to 46L:** Quad Low Voltage; **F:** Open-Frame or **B:** PCB Mount; **(W):** Class II Equipment.

Open-Frame Single-Quad w/Active PFC (0.98min)
175-200 Watt

FOR INDOOR USE ONLY

1. ELECTRICAL SPECIFICATIONS:

Input Voltage:
Universal 90VAC To 264VAC
Input Frequqncy:
47 Hz-63 Hz for All Units.
Input Current:
Less than 4 Amps RMS.
Output Voltage:
See Rating Table
Rated Output Power:
See Rating Table
Output Current:
No load to full load, no minimum load required
Output Ripple (Peak To Peak):
1% or 100 mV max, whichever is smaller; except for 3.3V out units which are 50mV maximum.
Output Regulation (Line/Load):
For single output units: +/- 5%; for multiple output units: +/- 5%; for main output +/- 5%; for second output and +/- 10%; for third and fourth output, measured at the end of output connector, with a 10% Min. Load on the main output.
Adjustability:
+/- 10% Main Output
Remote Sensing (option):
Provides regulation within +/- 2% of nominal voltage of main output. For 3.3V single output or 3.3V main of multi-output, Remote Sensing required.
Turn-On/Turn-Off Overshoot:
5% Maximum for all units.
Turn-On Delay:
0.5 Seconds Maximum
Hold-Up Time:
20 mS minimum at Nominal Line (120 VAC) for all units.
Inrush Current:
Less then 20 AMPS peak for North American Units, less then 40 Amp peak for European and Universal units at cold start
Efficiency:
75% Typical at full load.
Switching Frequency:
100 KHz Typical
Over-Voltage Protection:
Basic protection limits the output voltages below 130% of the nomimal voltage. Other options:
A) Shut down without latching. The units will shut down when over-voltage protection is activated at 130% of the nominal value, and automatically recover when the fault is removed.
B) Shut down and latched. The units will shut down when over-voltage protection is activated at 130% of the nominal value, and remain shutdown even after the fault is removed. The units can only be reset by cycling the input power.
Over Current/Short Circuit Protection:
Hiccup, automatic recovery.
Other Protection:
Input fusing, thermal shutdown.
Safety Approvals:
ITE Models:
UR to UL 60950, CUR to22.2 #950, EN60950
Medical Models:
UR to UL2601-1, C-UR to 22.2 # 601, EN60601
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(System Level), EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-11, EN61000-3-2, Class D Equipment, Active PFC Front Module. EN61000-3-3, Unit is eligible for CE mark.
PFC (Power Factor Correction):
0.98 Min. for all units
MTBF:
Greater then 50,000 hours calculated, stress analysis, ground fix environment
Operating Temperature:
0°C to 40°C
Humidity:
0 to 90% Relative Humidity
Storage Temperature:
-40°C to 80°C

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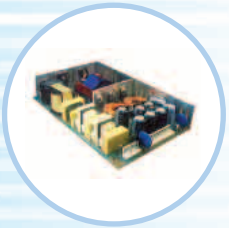
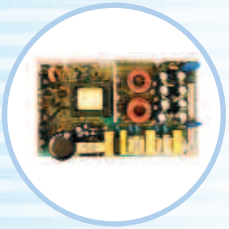


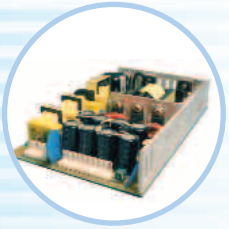

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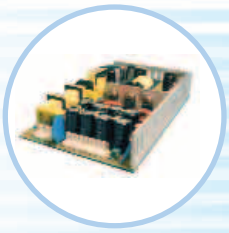
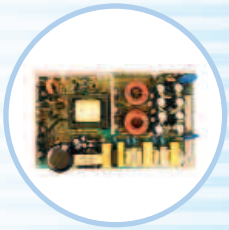


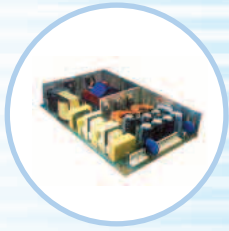

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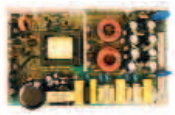


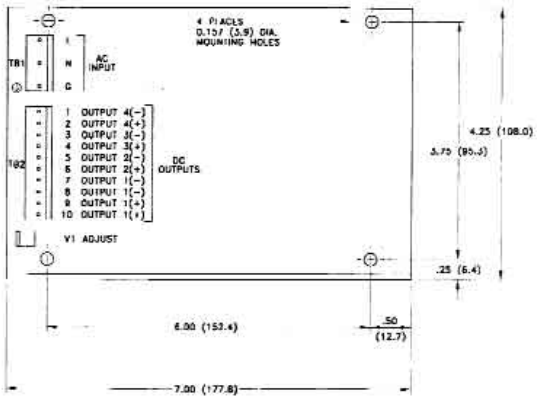
MECHANICAL: INCH (mm)

2. CONFIGURATION:
Open frame switching power supply, with mounting holes, positioned as shown below.
Option: PCB Mount, with in/out connectors headers pins on PCB solder side.

3. INPUT CONNECTOR:
3.1 Open Frame Configuration:
Straight square pin locking header, with .312 (7.92) between conductors, .045 (1.14) square pins. tin plated UL 94V-0 rated nylon housing, Molex no. 09-65-208 (5 circuits, with 2 pins removed). Header mates with Molex no. 2139 connector or equivalent.
3.2 PCB Mount Configurations:
Straight square pin non-locking header, with .312 (7.92) between conductors .045 (1.14) Square pins, tin plated UL94V-0 rated nylon base, Molex: 09-67-4051(5 circuits, with 2 pins removed), system board soldered.

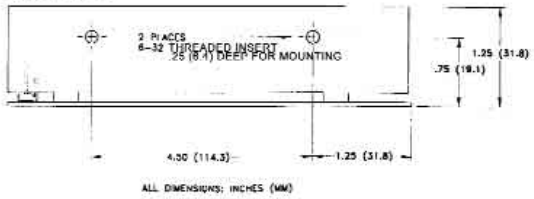
4. DRAWING:

TOP VIEW



SIDE VIEW

Open Frame



OUTPUT WIRING DIAGRAM

QUAD:GT-3Q200P-44F		SINGLE: GT-3S200P-5.0F	
PIN 1: -15V	PIN 6: +24V	PIN 1: COM	PIN 6 +5V
PIN 2: COM	PIN 7: COM	PIN 2: COM	PIN 7: +5V
PIN 3: COM	PIN 8: COM	PIN 3: COM	PIN 8: +5V
PIN 4: +15V	PIN 9: +5V	PIN 4: COM	PIN 9: +5V
PIN 5: COM	PIN 10: +5V	PIN 5: COM	PIN 10: +5V

MECHANICAL, CONT. INCH (mm)

5. LABEL:
Material: .002(0.005) thick flat thermal transfer, imprintable, matte metalized Mylor with black nomenclature.
Manufacturer: Graphtex, Inc., material I.D. No. GPN201483. UL file no.MH10966. UL material category ML1842. Optional label material can be substituted providing material is UL listed and complies with applicable safety requirements.

6. LABEL PLACEMENT:
Label is placed on component TI facing outwards.

Individual Packaging (Open Frame / PCB Units)
Each power supply shall be contained in a sealed polyester bubble wrap bag, two (2) units are packed per packing box, each in its own bubble wrap bag.

Individual Packing Box:
Material; Corrugated fiberboard, F-flute, .08 (2.0) thick, double wall construction.
External Finish: White, coated gloss finish (aqueous or varnish). Style: Tuck sides with locking tabs on both sides of box. No printing on outside of box.