

# GE Digital Energy Power Quality

## Introduction

With the Digital Energy™ GT Series, your mission critical equipment is protected from any fluctuation in your power source, enabling you to concentrate on your core activities. The GT Series is a true VFI (Voltage & Frequency Independent) **on-line double conversion, transformerless**, intelligent and high performance UPS.

This UPS provides critical power protection to suit a wide range of IT Networks, Telecom and other applications. The GT Series is easy to install and service, and is designed for maximum site flexibility. With an attractively designed modern common **tower and/or 19-inch rack mount cabinet**, the UPS can adapt as network configurations adapt.

For communication, the GT Series is equipped with RS232 and contact interface as standard; a web-enabled SNMP card is available as an option. Operation from remote or unmanned sites is simple to coordinate with standard remote monitoring functionality. No load shutdown, **automatic frequency detection**, settable minimum start-up runtime and extended runtime availability with optional battery packs are additional features of the GT Series UPS.

## Performance Features

- > Rack / Tower Mounting
- > Auto Sensing 50/60Hz
- > Extended Runtime Options – Additional Runtime with 2U Plug & Play Battery Packs
- > Additional Communications SNMP Card Slot
- > Included Monitoring & Operational Software
- > Built-in RS232 Communication Port
- > Emergency Power Off Terminal Connections for EPO
- > User-Replaceable Hot Swappable Batteries
- > Standard 2 Year Warranty
- > Wide Input Voltage Window
- > Internal Auto and Manual Bypass

## Applications

- > Computer and Data Centers
- > Call Centers
- > Telecommunications Equipment
- > Security Systems
- > Financial Institutions
- > Fixed and Mobile Voice and Data Transmission

## Vertical Markets

- > Healthcare
- > Education
- > Retail
- > Entertainment
- > Telecom
- > Financial
- > Broadcasting

# 5kVA & 6kVA Tower / Rackmount Digital Energy™ GT Series Uninterruptible Power Supply (UPS)



## Technical Specifications – UL listed

Model	GT5000 RT	GT6000 RT
<b>Ratings</b>		
Power ratings depending on input voltage	VA / W	VA / W
100V / 200V :	4000 / 3400	4800 / 3400
110V / 220V :	4500 / 3800	5400 / 3800
115V / 230V :	5000 / 4000	6000 / 4200
120V / 208V :	4800 / 4200	5200 / 4200
120V / 240V :	5000 / 4200	6000 / 4200
127V / 220V :	4800 / 4200	5200 / 4200
Input thermal circuit breaker (A)		30
Internal input fuse 250V, slow (A)		30
<b>Input converter</b>		
AC input voltage	Nominal: 120 / 208 V	
AC input voltage range	100/(173-200), 110/(190-220), 115/(198-230), 120/(208-240), 127/(220) V	
Input current waveform	sine wave	
Input current (A) at nominal input voltage	20	
Input power factor	> 0.97	
Input frequency range	40 - 70 Hz	
Input phase (L1 to L2)	120° / 180° / 240° ±10°	
Inrush current	40	
<b>Output converter</b>		
AC output voltage	100 / 110 / 115 / 120 / 127 V (selectable)	
AC output voltage tolerance	L-N ±3%; L1-L2 ±5%	
Output frequency	50 / 60 Hz, auto selection	
Output frequency range	nominal ± 5% with mains synchronizing	
Output waveform	sine wave	
Harmonic distortion	< 3% with linear load, < 5% with non-linear full load	
Power factor at nominal input voltage	0.87 0.8	
Crest factor (peak to RMS current)	≤ 3 : 1	
Capacity appliance outlets	with 55A Terminal Block	
<b>Bypass</b>		
AC input voltage range	± 15% of selected output voltage	
Frequency tracking rate	1Hz/s	
Frequency tracking range	± 5% of selected frequency	
Typical transfer time, msec	0	

Model	GT5000 RT	GT6000 RT
<b>Overload capability</b>		
Overload behavior during battery operation		130% for 10 seconds 200% for 2 seconds
Overload behavior during bypass operation		depends on rating of thermal circuit breaker (TCB) 125% of TCB value for 200 seconds 200% of TCB value for 10 seconds 300% of TCB value for 4 seconds
<b>Batteries (ratings given for 25°C)</b>		
Nominal voltage (Vdc)		144
Qty/ Ah (in battery kit and battery ext. pack)		12pcs / 8Ah
Type		REW45-12 FR
Recharge current		1 A
Battery recharge time (batt. discharged at 100% load)		6 hours for 90% capacity
<b>General</b>		
Weight UPS		30.3 Kg (67 lbs)
Dimensions UPS (hwxwd)		176x430x592 mm (6.9x16.9x22.55 in)
Weight battery pack		43 Kg (94.7 lbs)
Dimensions battery pack		87x430x592 mm (3.47x16.9x22.55 in)
Enclosure / protection		steel-plastic / IP20
Mounting		Rackmount or Tower mount with same unit
<b>Environment</b>		
Safety Approval		UL 1778
Electromagnetic compatibility		EMI: FCC CFR47 Part 15, class A, ESD: IEC61000-4-2, level 4 RS: IEC61000-4-3, level 3, EFT: IEC61000-4-4, level 4, Surge: IEC61000-4-5, level 3 ANSI C62.41 (IEEE587) Category A (level 3) & B (level 1)
Ambient temperature		0 to +40°C
Audible noise at 3.3 ft.		< 55 dBA, load and temperature dependent
Max. relative humidity		90% (non-condensing)
Color		Black - RAL 9005



## Modular PDU Plugs

Model	Outlets (NEMA)											Input (NEMA)		
	TB**	5-20R T		L5-20R		L5-30R		EN60320		L6-20R	L6-30R	L14-30R	TB**	L14-30R
		L1-N-G	L2-N-G	L1-N-G	L2-N-G	L1-N-G	L2-N-G	L1-N-G	L2-N-G	L1-L2-G	L1-L2-G	L1-N-L2-G		
GT PDU A 01*	1												1	
GT PDU A 02	1												1	
GT PDU A 03		2	2											1
GT PDU A 04		1	1							2		1		1
GT PDU A 05		2	2								2			1
GT PDU A 06								2	2					1
GT PDU A 07				2	2	1	1							1
GT PDU A 08				2	2						2			1
GT PDU A 09										4				1

\*: No 3 pole 6 ms maximum transfer time manual bypass. \*\*: TB = Terminal Block

## Battery Run Times

Model	Load	Internal Batteries	1 Battery Pack	2 Battery Packs	3 Battery Packs
GT5000 RT / GT6000 RT	10%	75 min	156 min	235 min	313 min
	25%	31 min	75 min	115 min	155 min
	50%	14 min	34 min	58 min	82 min
	75%	8 min	22 min	35 min	50 min
	100%	5 min	14 min	25 min	36 min



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