

# 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.

Both the power and redundancy of the system can be expanded by **adding units (N+2) to create a parallel system**. 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
- > Internal/Automatic and Manual Bypass
- > User-Replaceable Hot Swappable Batteries
- > User-Replaceable Hot Swappable Power Unit
- > Standard 2 Year Warranty
- > Parallel N+2 or N+1 Redundancy

## 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

# 8kVA & 10kVA Tower / Rackmount Digital Energy™ GT Series Uninterruptible Power Supply (UPS)



## Technical Specifications – UL listed

Model	GT8000 RT	GT10000 RT
<b>Ratings</b>		
Power ratings depending on input voltage	VA / W	VA / W
100V / 200V :	6400 / 6400	8000 / 6400
110V / 220V :	7200 / 7200	9000 / 7200
115V / 230V :	8000 / 8000	10000 / 8000
120V / 208V :	8000 / 6900	8700 / 8000
120V / 240V :	8000 / 8000	10000 / 8000
127V / 220V :	8000 / 6900	8700 / 8000
Input thermal circuit breaker (A)	60	
Internal input fuse 250V, slow (A) /Qty	30 / 2	
<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	40	
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 ± 2%; 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	0.86	0.92
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	GT8000 RT	GT10000 RT
<b>Overload capability</b>		
Overload behavior during battery operation	130% for 1 minute 200% for 5 seconds	
Overload behavior during bypass operation	overload protection 110% of TCB value for 300 seconds 130% of TCB value for 30 seconds 200% of TCB value for 5 seconds	
<b>Batteries (ratings given for 25°C)</b>		
Nominal voltage (Vdc)	288	
Qty/ Ah (in battery kit and battery ext. pack)	24 / 8Ah	
Type	REW45-12 FR	
Recharge current	1 A	
Battery recharge time (batt. discharged at 100% load)	3 hours for 90% capacity	
<b>General</b>		
Weight UPS	49.3 Kg (109 lbs)	
Dimensions UPS (hwxwd)	267x430x660 mm (10.5x16.9x26 in)	
Weight battery pack	91 Kg (200.4 lbs)	
Dimensions battery pack	173x430x660 mm (6.8x16.9x26 in)	
Enclosure / protection	steel-plastic / IP20	
Mounting	Rackmount or Tower mount with same unit	
<b>Environment</b>		
Safety Compliance	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 dB(A), load and temperature dependent	
Max. relative humidity	90% (non-condensing)	
Color	Black - RAL 9005	



## Modular PDU Plugs

Model	Outlets (NEMA)					
	5-20R T-type		L5-20R		L6-20R	L6-30R
	L1-N-G	L2-N-G	L1-N-G	L2-N-G	L1-L2-G	L1-L2-G
GT PDU B 01	4	4				2
GT PDU B 02	2	2			4	
GT PDU B 03	2	2				4
GT PDU B 04	2	2			2	2
GT PDU B 05	2	2	1	1		2
GT PDU B 06			2	2	4	

## Battery Run Times

Model	Load	Internal Batteries	1 Battery Pack	2 Battery Packs	3 Battery Packs
GT8000 RT / GT10000 RT	10%	107 min	251 min	333 min	494 min
	25%	40 min	100 min	160 min	225 min
	50%	16 min	39 min	66 min	92 min
	75%	10 min	24 min	41 min	58 min
	100%	6 min	17 min	28 min	41 min



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