

# TOSHIBA

TOSHIBA INTERNATIONAL CORPORATION

POWER ELECTRONICS DIVISION

# Single-Phase



**SOLUTIONS**

MODEL				
Model Number - Tower	T1S0A1000AXA	T1S0A1500AXA	T1S0A2000AXA	T1S0A3000AXA
Model Number - Rackmount (2U)	T1S0A1000AXAR2	T1S0A1500AXAR2	T1S0A2000AXAR2	T1S0A3000AXAR2 / T1S0A3000AXAR2P1
Power Rating VA/Watts	1000/900	1500/1350	2000/1800	3000/2700
Topology	True Online, Double-Conversion			
Certifications	UL 1778, CUL, FCC			
INPUT				
Nominal Input Voltage	120V			
Input Voltage Range	90-144V @ Full Load Minimum: 60V at 25%, 70V at 50%, 80V at 75% Load +/-5V			
Input Frequency	50/60 Hz Auto-Sensing			
Input Power Factor	Greater than 0.97			
Input Connections	NEMA 5-15P	NEMA 5-15P	NEMA 5-20P	NEMA L5-30P
OUTPUT				
Nominal Output Voltage	120V			
Other Output Voltage	100/110/115 (selectable from LCD panel)			
Output Frequency	50/60 Hz +/- 5%			
Output Voltage Distortion	< 5% THD at full non-linear load, < 2.5% THD at full linear load			
Output Connections (Tower Model)	5-15R x 6	5-15R x 6	5-20R x 12	5-20R x 8, L5-30R x 1
Output Connections (Rack Model)	5-15R x 6	5-15R x 6	5-20R x 4	5-20R x 4 or 5-20R x2, L5-30R x1
Wave Form	Sinewave			
Load Power Factor	0.90			
Efficiency AC/DC/AC	86%			
Overload Capacity	106-120% 30sec.; 121-150% 10sec.			
Crest Factor	3:1			
BATTERY				
Battery Voltage (Tower Model)	36V / 12V 9AH x 3	48V / 12V 9AH x 4	72V / 12V 9AH x 6	96V / 12V 9AH x 8
Battery Voltage (Rack Model)	36V / 12V 9AH x 3	48V / 12V 9AH x 4	72V / 12V 9AH x 6	
Est. Back-Up Time (Tower Model)	5 minutes (full load)			
Est. Back-Up Time (Rack Model)	5 minutes (full load)			3 minutes (full load)
Battery Type	Valve-Regulated Lead Acid; Flame Retardant (9.0 AH)			
Typical Recharge Time	< 4 hours to over 90%			
PHYSICAL				
Interface	RS232, USB, Monitoring Card Slot			
Dimensions of Tower (W x D x H)	6.0 x 16.5 x 9.4	6.0 x 19.7 x 9.4	8.9 x 16.5 x 14.1	
Dimensions of Rackmount (W x D x H)	16.9 x 16.7 x 3.3	16.9 x 19.7 x 3.3	16.9 x 25 x 3.3	
Net Weight Tower	33.4 lbs.	42.7 lbs.	67.1 lbs.	68.4 lbs.
Net Weight Rackmount	35.9 lbs.	39.4 lbs.	65.6 lbs.	73.9 lbs.
ENVIRONMENT				
Operating Temperature	0° to 40°C (32° to 104°F)			
Altitude	2,000 Meters (6,600 ft.) Above Sea Level Maximum - No Derating Under 1,000 Meters - (304.8 ft.)			



## 3 THREE YEAR WARRANTY

Three Years on Electronics; Two Years Full Replacement on Battery; See Toshiba Single-Phase Warranty Policy for Full Details

# T1000 SERIES

5200-6000 VA

MODEL						
Model Number - Tower	T1S4A5200GXG	T1S6A5200GXA	T1S0A6000GXG	T1S2A6000GXG	T1S4A6000GXG	T1S6A6000GXA
Model Number - Rackmount	T1S4A5200GXGR6 (6U)	T1S6A5200GXAR9 (9U)	T1S0A6000GXGR6 (6U)	T1S2A6000GXGR6 (6U)	T1S4A6000GXGR6 (6U)	T1S6A6000GXAR9 (9U)
Power Rating VA/Watts	5200/4680		6000/5400			
Topology	True Online, Double-Conversion					
Certifications	UL 1778, CUL					
INPUT						
Input Voltage	208/240V					
Input Frequency	50/60 Hz Auto-Sensing					
Input Power Factor	Greater than 0.97					
Input Connections	L6-30P		Hardwire		6-50P	
OUTPUT						
Output Voltage	200/208/220/230/240V (L-L) and Optional 3000VA Isolation Transformer for 120V (5-20R x 8)					
Output Frequency	50 / 60Hz					
Output Voltage Distortion	< 5% THD at full non-linear load, < 3% THD at full linear load					
Output Connections	(2) L6-30R, (2) L6-20R	(1) L6-30R, (2) L6-20R, (8) 5-20R (3000VA Transformer)	Hardwire	(2) L6-30R, (2) L6-20R	(2) L6-30R, (2) L6-20R	(1) L6-30R, (2) L6-20R, (8) 5-20R (3000VA Transformer)
Wave Form	Sinewave					
Load Power Factor	0.9					
Efficiency AC/DC/AC	87% w/o Transformer					
Overload Capacity	125% for 1 min., 150% for 10 sec.					
Crest Factor	3:1					
BATTERY						
Battery Voltage	216 Vdc / 12V 9AH x 18 (1 batt. module)					
Backup Time	5 min (full load)					
Battery Type	Valve-Regulated Lead Acid; Flame Retardant (9.0 AH)					
Typical Recharge Time	4 hours to 90%					
PHYSICAL						
Interface	Remote Contact, USB, Monitoring Card Slot					
Dimensions Tower (W x D x H)	24.4" x 10.4" x 16.7" (2 modules); 24.4" x 15.6" x 16.7" (3 modules)					
Dimensions Rackmount (W x D x H)	24.4" x 16.7" x 10.4" (6U); 24.4" x 16.7" x 15.6" (9U)					
Net Weight	Power Module - 63 lbs.; Battery Module - 147 lbs.; Transformer Module - 76 lbs.					
ENVIRONMENT						
Operating Temperature	0° to 40°C (32° to 104°F)					



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MODEL							
1600XPi Model Number (Tower)	H3BG2L036C61T	H3BG2L060C61T	H3BG2L080C61T	H3BG2L100C61T	H3BG2L140C61T	H3BG2L180C61T	H3BG2L220C61T
Power Rating kVA (kW)	3.6 kVA (3.1 kW)	6 kVA (5.1 kW)	8 kVA (6.8 kW)	10 kVA (8.5 kW)	14 kVA (11.9 kW)	18 kVA (15.3 kW)	22 kVA (18.7 kW)
Topology	True Online, Double-Conversion; IGBT Power Factor Corrected Input; Internal Isolation Transformer						
Certifications	UL 1778, CUL						
INPUT							
Input Voltage	Single-Phase 208/240 VAC (Three-Wire Input/L-L, G); 230 VAC (Three-Wire Input/L, N, G), +10% -30% (Based on Typical 70% Load)						
Input Frequency	45 to 65 Hz (Auto-Sensing)						
Input Power Factor	Greater than 0.95 For All Loads						
Current THD	< 5% (Even for 100% Non-Linear Loads)						
AC Input Breaker Rating	30 A	50 A	60 A	63 A	100 A	100 A	125 A
OUTPUT							
Output Voltage	Single-Phase 240/208/120 VAC (Four-Wire Output/L-L, N, G)						
Output Voltage Regulation	±3%; ±1% Typical						
Frequency	50/60 Hz; ±0.5 Hz/1.0 Hz/1.5 Hz (Factory or Authorized Service Center Selectable)						
Output Voltage Distortion	< 6% THD at full non-linear load, < 3% THD at full linear load						
Wave Form	Sinewave						
Load Power Factor	0.85						
Efficiency AC/DC/AC	Greater than 85%						
Rated Output Current @ 240 V	15 A	25 A	33.3 A	41.6 A	58 A	75 A	91.6 A
Overload Capacity	Inverter Mode: 150% for 10 Seconds, 125% for 30 seconds; Bypass Mode: 125% for 10 Minutes, 1000% for One Cycle						
Crest Factor	3:1						
BATTERY							
Battery Type	Valve-Regulated Lead Acid; Flame Retardant (9.0 AH)						
Backup Time (Fully Charged)	7 Minutes	7 Minutes	7 Minutes	5 Minutes	7 Minutes	5 Minutes	3 Minutes
Recharge Time	24 Hours (Full), 12 Hours (90%)						
Battery Voltage	144 VDC	216 VDC					288 VDC
PHYSICAL							
Interface	RS-232 and Remote Contact Standard, RemotEye® 4 Standard for 1600XPi						
Dimensions (W x D x H)	10" x 34" x 22.1"	10" x 34" x 27.5"	13" x 34.9" x 28.3"		17.5" x 36.1" x 39"		
Net Weight	260 lbs.	366 lbs.	452 lbs.	492 lbs.	777 lbs.	865 lbs.	866 lbs.
Shipping Weight	308 lbs.	414 lbs.	506 lbs.	546 lbs.	839 lbs.	927 lbs.	928 lbs.
Enclosure	Steel Enclosure; Complies with NEMA 1 and UL Type-1 Standard						
Battery Pack Qty (6 batteries per pack)	2	3	4		8		
ENVIRONMENT							
Operating Temperature	0° to 40°C (32° to 104°F)						
Altitude	2,000 Meters - (6,600 Feet) Above Sea Level, Maximum Without Derating						
Audible Noise	< 60 DBA at 1 Meter						
ADDITIONAL FEATURES							
	Output Isolation Transformer, Angled Terminal Blocks for Easy Installation, Casters for Mobility						
OPTIONS							
SNMP & WEB-Based Monitoring	RemotRadar™, Environmental Monitoring Device Option						
Input/Output Connection Options	Line Cord and Receptacle Option						



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# INNOVATIVE UPS SOLUTIONS FOR CRITICAL APPLICATIONS

Toshiba Uninterruptible Power Systems (UPS) features a specialized suite of single-phase UPS products renowned for reliable and efficient power supply protection and monitoring.

Conveniently available in both tower and rack-mount designs, Toshiba single-phase UPS products supply clean and uninterrupted power to the critical systems powering datacenters, telecommunications, retail, healthcare, broadcasting, and industrial applications.

Toshiba single-phase UPS products are anchored by unique advantages resulting in innovative solutions for a wide range of applications:

## INSULATED-GATE BIPOLAR TRANSISTORS

Insulated-gate bipolar transistors (IGBTs) are an input power factor correction technology. This technology allows UPS products to maintain a constant DC level without requiring more reactive power. IGBTs actively protect critical equipment by correcting potential power abnormalities such as spikes and brownouts. As a result, Toshiba single-phase UPS products are highly efficient with precise voltage control, wide input windows for voltage and frequency, and increased life expectancy.

## TRUE ONLINE DOUBLE-CONVERSION

The true online double-conversion topology ensures delivery of clean and stable power to critical loads by converting and conditioning utility power first to DC and then back to AC. For extra precaution, the UPS topology also isolates the critical load from utility power.

## AVAILABLE OPTIONS

Toshiba UPS installations may be customized to meet varying application requirements thanks to a number of available options. Maintenance bypass systems and transient voltage surge suppressors provide additional protection from extreme utility power abnormalities. Isolation protection is available for the 1600XPi Series UPS models.

## REMOTE MONITORING

Toshiba offers RemoteRadar®, an On-premise cloud monitoring system to protect your valuable equipment and assets anytime and anywhere. RemotEye® is a complete Toshiba UPS management card to control and monitor remotely via Simple Network Management Protocol (SNMP), Hypertext Transfer Protocol (HTTP), Modbus TCP/RTU, and BACNET IP/MSTP. Features include email notifications and automated orderly shutdown to minimize data loss.

## THREE YEAR WARRANTY

Toshiba single-phase UPS products come standard with the security of a three year warranty including dedicated 24/7 customer service and support.



## INDUSTRIES SERVED

- Data Center
- Industrial
- Commercial
- Emergency/Healthcare

## SINGLE-PHASE APPLICATIONS

- Computer Systems
- Server Rooms
- Voice/Data Network Closets
- Edge Data Centers
- Point of Sale Equipment
- Banking Systems
- Retail Back Office Systems
- School System Computer Rooms
- Medical Labs
- Light Industrial



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Uninterruptible Power Systems • SCiB™ Lithium Ion Batteries  
Energy Management Systems • Remote Monitoring

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