

TOSHIBA

Leading Innovation >>>



SINGLE-PHASE SOLUTIONS

UNINTERRUPTIBLE POWER SYSTEMS



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

Developed in-house, 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 1000+ and 1600XP Series UPS models.

> REMOTE MONITORING

Toshiba offers a suite of products to monitor the status of one or many Toshiba UPS installations. RemotEye® II/III is a complete Toshiba UPS management solution to control and monitor remotely via Simple Network Management Protocol (SNMP), Hypertext Transfer Protocol (HTTP), and Modbus TCP. 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.





> 1000 SERIES

MODEL	1000 VA	1500 VA	2000 VA	3000 VA	6000 VA
Size	1000 VA	1500 VA	2000 VA	3000 VA	6000 VA
TOWER					
US 120V Model	UT1A1A010C6	UT1A1A015C6	UT1A1A020C6	UT1A1A030C6	—
International 230V Model	UT1E1E010C6	UT1E1E015C6	UT1E1E020C6	UT1E1E030C6	—
RACK-MOUNT (2U)					
US 120V Model	UT1A1A010C6RKB2	UT1A1A015C6RKB2	UT1A1A020C6RKB2	UT1A1A030C6RKB2	—
230V Model	UT1E1E010C6RKB2	UT1E1E015C6RKB2	UT1E1E020C6RKB2	UT1E1E030C6RKB2	UT1G1G060C6RKB3 + UT1-BR-0607
INPUT					
Voltage	120 VAC (80 to 144 V, +20% to -33%)				—
International Voltage	230 VAC (161 to 276 V, +20% to -30%)				—
Capacity (VA)	1000 VA	1500 VA	2000 VA	3000 VA	6000 VA
Capacity (W)	700 W	1050 W	1400 W	2100 W	4200 W
Frequency	50/60 Hz Auto-Sensing				
Power Factor	Greater than 0.97				
Topology	True Online, Double-Conversion, Input PF Correction				
OUTPUT					
Voltage	100/110/115/120/127 VAC				—
International Voltage	208/220/230/240 VAC				—
Frequency	50/60 Hz Auto-Sensing				
Wave Form	Sinewave, Zero Transfer Time				
Load Power Factor	0.70				
Efficiency AC/DC/AC	> 86%				> 89%
Rated Current	8.3 A	12.5 A	16.6 A	25 A	—
International Rated Current	4.3 A	6.5 A	8.7 A	13 A	25 A (240 V)
Overload Capacity	125% for 1 Minute; 130% for 10 Seconds				
Crest Factor	3.0 Seconds at Full Load				
BATTERY					
DC Link (Tower & 2U)	36 V/12 V 9 AH x 3		72 V/12 V 9 AH x 6		240 V 12 V x 20
Back-Up Time (Tower & 2U)	7 Minutes (Full Load)	6 Minutes (Full Load)	6 Minutes (Full Load)	5 Minutes (Full Load)	7 Minutes (Full Load)
Type	Valve-Regulated Lead Acid; Flame Retardant (9.0 AH)				
PHYSICAL					
Interface	RS-232 & USB Standard, Remote Contact, RemotEye® II, & Environmental Monitoring Device				
Dimensions of Tower (L x W x H)	16.5" x 6.0" x 9.4"		16.7" x 8.9" x 14.2"		—
Dimensions of 2U (L x W x H)	16.7" x 16.9" x 3.5"		25.0" x 16.9" x 3.5"		16.8" x 23.5" x 10.5" (6U)
Weight (Tower/2U)	35.6 lbs. / 37.6 lbs.	37.4 lbs. / 37.6 lbs.	68.4 lbs. / 69.5 lbs.	72.6 lbs. / 71.5 lbs.	148 lbs.
Line Cord	5-15P		5-20P	L5-30P	—
International Line Cord	IEC 320				Hardwire & L6-30P
Receptacles (Tower/2U)	NEMA 5-15R (6/6)		NEMA 5-20R (12/4)		L6-30R (2)
International Receptacles (Tower/2U)	IEC 320 C13 (4/4)	IEC 320 C13 (4/4)	IEC 320 C13 (8/4)	IEC 320 C13 (8/4)	
ENVIRONMENT					
Operating Temperature	0° to 40°C (32° to 104°F)				
Altitude	11,500 Feet (3,500 Meters) Above Sea Level				
WARRANTY	Three Years on Electronics; Two Years Full Replacement on Battery; See Toshiba Single-Phase Warranty Policy for Full Details				



> 1000+ SERIES

MODEL

Size	1000 VA	2400 VA
US 120V Model	UT1A1A010C6T	
International 230V Model	—	UT1G2L024C6T

INPUT

Voltage	120 VAC	Single-Phase 208/240 VAC (Three-Wire Input/L-L, G) (160-276V, +15% to -34%)
International Voltage	—	
Capacity (VA)	1000 VA	2400 VA
Capacity (W)	700 W	1920 W
Frequency	50/60 Hz Auto-Sensing	
Power Factor	Greater than 0.97	
Topology	True Online, Double-Conversion, Input PF Correction Isolation Transformer	

OUTPUT

Voltage	100/110/115/120/127 VAC	120/200/208/220/230/240 VAC
International Voltage	208/220/230/240 VAC	
Frequency	50/60 Hz Auto-Sensing	
Wave Form	Sinewave, Zero Transfer Time	
Load Power Factor	0.70	0.80
Efficiency AC/DC/AC	> 86%	> 87%
Rated Current	8.3 A	10 A (240 V)
International Rated Current	—	
Overload Capacity	125% for 1 Minute; 130% for 10 Seconds	
Crest Factor	3.0 at Full Load	

BATTERY

DC Link (Tower & 2U)	36 V / 12 V 9 AH x 3	72 V / 12 V 9 AH x 12 (2 Strings)
Back-Up Time (Tower & 2U)	7 Minutes (Full Load)	11 Minutes
Type	Valve-Regulated Lead Acid; Flame Retardant (9.0 AH)	

PHYSICAL

Interface	RS-232 & USB Standard, Remote Contact, RemotEye® II, & Environmental Monitoring Device	
Dimensions of Tower (L x W x H)	23.3" x 6.0" x 9.4"	23.2" x 10.1" x 27.6"
Dimensions of 2U (L x W x H)	—	
Weight (Tower/2U)	51 lbs.	154.3 lbs.
Line Cord	5-15P	Hardwire or Optional L6-20P
International Line Cord	—	
Receptacles (Tower/2U)	NEMA 5-15 (6)	Hardwire/Optional (3) 5-20R or (2) L6-20R & (1) 5-20R Duplex
International Receptacles (Tower/2U)	—	

ENVIRONMENT

Operating Temperature	0° to 40°C (32° to 104°F)
Altitude	11,500 Feet (3,500 Meters) Above Sea Level

WARRANTY

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



> 1600XP SERIES

MODEL

Size	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, CE, FCC Class A, IEEE 587, ANSI/C62.41, ISO 9001, ISO 14001, NEMA/PE1-1993, RoHs						

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)						
Frequency	45 to 65 Hz (Auto-Sensing)						
Power Factor	> 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

Voltage	Single-Phase 240/208/120 VAC (Four-Wire Output/L-L, N, G) 230 VAC (Three-Wire Output L, N, G)						
Voltage Regulation	±3%; ±1% Typical						
Frequency	50/60 Hz; ±0.5 Hz/1.0 Hz/1.5 Hz (Factory or Authorized Service Center Selectable)						
Voltage THD	< 3% for Linear Load; 1% Typical						
Common Mode Noise	< 0.5 V RMS						
Rated-Load Power Factor	0.85 (0.6 to 1.0) Lag						
Rated Output Current @ 240 V	15 A	25 A	33.3 A	41.6 A	58 A	75 A	91.6 A
Maximum Peak Output Current	45 A	75 A	100 A	125 A	174 A	225 A	275 A
Overload Capacity	Inverter Mode: 150% for 10 Seconds, 125% for 30 seconds; Bypass Mode: 125% for 10 Minutes, 1000% for One Cycle						

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
	0.85 Power Factor; 77°F; Approximately 30% More Runtime for Output Power Factor of 0.7 (Triple Backup Time at ½ Load)						
Recharge Time	24 Hours (Full), 12 Hours (90%)						
DC Link	144 VDC	216 VDC			288 VDC		

ENVIRONMENT

Efficiency (AC-DC-AC)	> 85%						
Temperature Range	0 to 40°C (Operating); -20° to +40°C (Storage)						
Heat Generation (BTU/Hr)	1,843	3,071	4,095	5,118	7,168	9,213	11,260
Altitude	6,600 Feet (2,000 Meters) Maximum Without Derating						
Audible Noise	< 60 DBA at 1 Meter						

MECHANICAL

Enclosure	Steel Enclosure; Complies with NEMA 1 and UL Type-1 Standard						
Enclosure Dimensions (L x W x H)	33" x 10" x 22.1"	33" x 10" x 27.5"	34.9" x 13" x 28.4"		36.1" x 17.5" x 39.1"		
Shipping Weight	280 lbs. / 127 kg	346 lbs. / 157 kg	476 lbs. / 214 kg	784 lbs. / 355 kg	784 lbs. / 355 kg	835 lbs. / 379 kg	
Battery Pack Size (L x W x H)	19" x 7.3" x 5" (Battery Pack Part # 51896-FS)						
Battery Pack Quantity	2	3	4		8		

ADDITIONAL FEATURES

Output Isolation Transformer, RS232 & Dry Contact Interface, Crest Factor of 3, Angled Terminal Blocks for Easy Installation, Casters for Mobility

OPTIONS

SNMP & WEB-Based Monitoring	RemotEye® III, RemotRadar™, & Environmental Monitoring Device
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WARRANTY

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TOSHIBA POWER ELECTRONICS DIVISION:

- Uninterruptible Power Systems
- Rechargeable Batteries
- Power Conditioning Systems
- Remote Monitoring

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