

## UNINTERRUPTIBLE POWER SYSTEMS



**XT**

# 1600EP Series

**3** Year  
Warranty

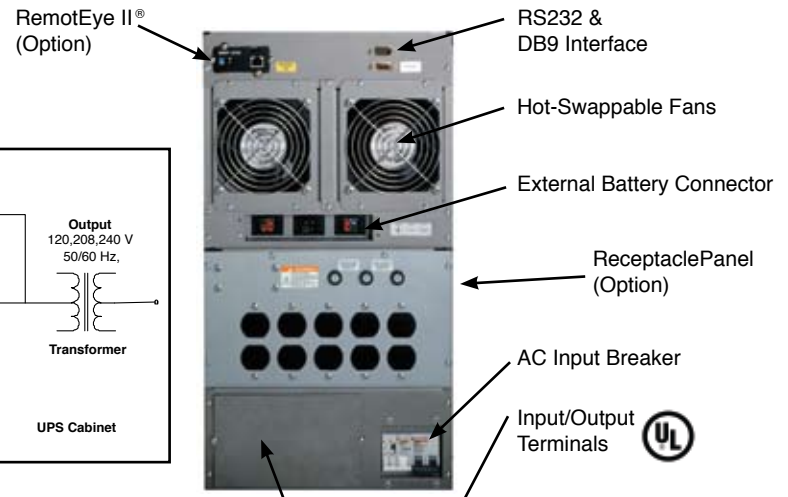
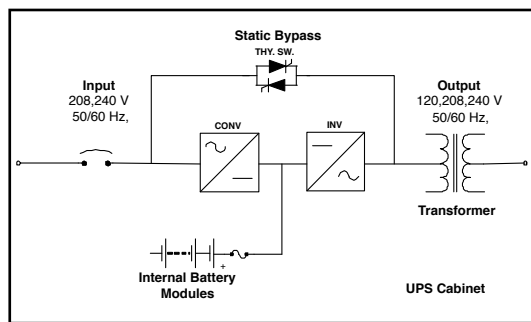
3.6 to 22 kVA Single Phase

- True On-Line, Double Conversion UPS
- ← Input Power Factor > 0.95
- ← Input Current THD < 5%
- ← Wide Input Voltage Window +10% to -30%
- ← Wide Input Frequency Window 45 to 65 Hz
- ← 0.85 Output Power Factor; More Usable Watts per kVA
- ← Electronic Power Factor Correction for 100% Generator Compatibility
- ← Hot-Swappable Battery Packs and Cooling Fans
- ← Internal Isolation Transformer
- ← Digital LCD
- ← Programmable Front Keypad
- ← External Battery Connector

**Reliability in motion<sup>®</sup>**

# 1600EP Series 3.6 to 22 kVA UPS

Capacity	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 On-line, 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						
<b>Input Characteristics</b>							
Input Voltage	Single Phase 208/240 Vac (Three-Wire Input/L-L, G); 230 Vac (Three-Wire Input/L, N, G), +10% -30%						
Input Frequency	45 to 65 Hz (Auto Sensing)						
Input Power Factor	> 0.95 For All Loads						
Input 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
<b>Battery Characteristics</b>							
Battery Type	Valve Regulated Lead Acid; Flame Retardant (9.0 Amp Hr)						
Backup Time (Fully Charged)	10 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	216 VDC			288 VDC			
<b>Output Characteristics</b>							
Output Voltage	Single Phase 240/208/120 Vac (Four-Wire Output/L-L, N, G) 230 Vac (Three-Wire Output L, N, G)						
Output Voltage Regulation	± 3 Max.; ± 1% Typical						
Output Frequency	50/60 Hz; ± 0.5 Hz/ 1.0 Hz/ 1.5 Hz (Factory or Authorized Service Center Selectable)						
Output 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						
Efficiency (ac-dc-ac)	> than 85%						
Rated Output Current @ 240 V	15 A	25 A	33.3 A	41.6 A	58 A	75A	91.6 A
Maximum Peak Output Current	45 A	75 A	100 A	126 A	174 A	225 A	275 A
Overload Capacity	150% for 10 Seconds and 125% for 10 Minutes; Bypass 1000% for 1 Cycle						
Heat Generation (BTU/Hr)	1588	2610	3482	4352	6092	7832	9600
<b>Mechanical Design</b>							
Enclosure	Steel Enclosure; Complies with NEMA 1 and UL Type-1 Standard						
Enclosure Dimensions (HxWxD)	27.5" x 10" x 33"		28.4" x 13" x 33.5"			39.1" x 17.5" x 34.8"	
Shipping Weight	371 Lbs./168 Kg	395 Lbs./179 Kg	533 Lbs./242 Kg	835 Lbs./379 Kg	835 Lbs./379 Kg	835 Lbs./379 Kg	835 Lbs./379 Kg
Battery Pack Size (HxWxD)	5" x 7.3" x 18.2" (Six Batteries of NPX-35 Per Pack)						
Battery Pack Quantity	Three			Four		Eight	
<b>Options</b>							
RemotEyeII	SNMP & WEB Based Monitoring, Internal and External Modules Available						
Matching Battery Cabinet	Consult Factory						
Internal/Ext. Maintenance Bypass	Consult Factory						
Receptacle Panel & Line Cord	Consult Factory						
<b>Warranty</b>	<b>Three Years on Electronics (UPS); Two Years on Battery (See Toshiba Warranty Policy for Full Details)</b>						



**UPS    ADJUSTABLE SPEED DRIVES    MOTORS    CONTROLS    INSTRUMENTATION    PLC**

# TOSHIBA

**TOSHIBA INTERNATIONAL CORPORATION  
INDUSTRIAL DIVISION**

13131 West Little York Road, Houston, Texas 77041  
 Tel 713/466-0277 Fax 713/466-8773  
 US 800/231-1412 Canada 800/872-2192 Mexico 001/800/527-1204  
 www.toshiba.com/ind  
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