XTREME POWER CONVERSION TX90 PARALLEL SYSTEM // TOSHIBA 1600XP COMPARISON

The TX90 is a true online UPS with internal isolation transformer. TX90 is available from 1kVA to 10kVA and parallel configurations up to 40kVA or 30kVA N+1.



20kVA COMPARISON

	XTREME TX90-20K40	TOSHIBA 1600XP 22KVA	ADVANTAGES
Capacity	20KVA/18KW	22KVA/18.7KW	Xtreme Power TX90 has a higher .9PF. Toshiba 1600XP has a .85 PF.
Modular Design	Modular Design	Not Available	Xtreme Power modular capability allows for easy expansion up to 40kVA, in 10kVA increments, for capacity or redundancy.
Topology	Online Double Conversion with Isolation Transformer	Online Double Conversion with Isolation Transformer	Both Xtreme Power TX90 and Toshiba 1600XP provide galvanic isolation in addition to on- line topology, providing the highest degree of power protection.
Efficiency - Online Mode (AC-AC)	91%	85%	Xtreme Power TX90 higher efficiency means lower utility power usage and less heat than Toshiba 1600XP.
Efficiency - ECO Mode	97%	Not Available	Xtreme Power TX90 ECO mode provides additional energy savings using the Power Conditioned Bypass for primary operation. ECO mode is not available on the Toshiba 1600XP.
Display	LCD	Touch Screen	Both Xtreme Power TX90 and Toshiba 1600XP offer an intuitive graphical interface display. Toshiba also has touchscreen capability.
Maintenance Bypass	Standard External Maintenance Bypass	Optional External Maintenance Bypass	Xtreme Power TX90 parallel system comes with a standard External Maintenance Bypass switch allowing for total isolation of the UPS system while allowing critical loads to operate. Toshiba external bypass is available at additional cost.
Battery Service	Hot Swappable Battery Packs	Hot Swappable Battery Packs	Both Xtreme Power TX90 and Toshiba 1600XP provide easy to replace battery packs
Startup Services	Included	Available at Additional Cost	TX90 Parallel UPS systems include Standard 5x8 Startup Services. Toshiba 1600XP Startup Services add an additional \$1,200 net cost to the price of the system.
Warranty UPS / Batteries	3 Years / 3 Years	3 Years / 2 Years	Xtreme Power TX90 warranty cover a full 3 years parts and depot repair labor for both the UPS and batteries. Toshiba 1600XP has only 2 year battery warranty.

