

# Yearly Costs of Wasted Energy and Heat Removal of 750kVA UPSs

## 750kVA UPS with 94% Efficiency, 146,000 BTUs/Hr, .9PF Load, \$0.10/kW Hr

UPS =	365	Days x	24	Hours x	40.50	kW =	354780	kWh/year
UPS x	\$ 0.10	=			(750kVA x .9 PF x 6% Eff Loss)	\$	35,478.00	Cost of Unused Energy
A/C UPS Heat =	146,000	BTUs /	3.4142	=	42.76	kW =	374600	kWh/year (42.76 x 8760)
A/C UPS Heat x	\$ 0.10	=			(146,000/3.4142)/1000	\$	37,460.02	Cost to remove Heat Generated by UPS
						\$	<b>72,938.02</b>	<b>Total Cost</b>

## Toshiba G9000 750kVA

UPS =	365	Days x	24	Hours x	20.25	kW =	177390	kWh/year
UPS x	\$ 0.10	=			(750kVA x .9 PF x 3% Eff Loss)	\$	17,739.00	Cost of Unused Energy
A/C UPS Heat =	76,773	BTUs /	3.4142	=	22.49	kW =	196981	kWh/year (22.49 x 8760)
A/C UPS Heat x	\$ 0.10	=			(76,773/3.4142)/1000	\$	19,698.07	Cost to remove Heat Generated by UPS
						\$	<b>37,437.07</b>	<b>Total Cost for the Toshiba Unit per Year</b>

## Toshiba UPS System Efficiency Benefits per Year:

**\$ 35,500.95**  
**Saving per year with the Toshiba UPS System**