

**The Topaz 700** power conditioning system from **MGE UPS SYSTEMS** provides exceptional system reliability that can be attributed to MGE's microprocessor-controlled zero-current crossing tap switching technology.

The **Topaz 700** combines solid state, microprocessor based voltage regulation, with a multi-shield computer grade transformer and filter to remove transients and noise. The combined effect is a regulating and shielded isolation transformer/system that solves 99% of the electrical disturbance problems.

The **Topaz 700** protects your system against electrical brownouts, sags, surges, transients and other electrical disturbances. This power conditioner also provides the protection, efficiency, and reliability that are critical to every application with sensitive equipment.

THE UNINTERRUPTIBLE POWER PROVIDER

# Topaz 700 10kVA to 300kVA

Intelligent protection for transmitters & industrial controls

#### **Advanced Features**

- Fast microprocessor controlled voltage regulation
- Tight output voltage regulation
- ▶ Zero-current switching
- Wide input regulation range
- Triple shield computer grade transformer
- ▶ 97% efficiency
- High inrush capability
- Transient protection and high frequency filter
- Over/under voltage protection (optional)
- Includes input circuit breaker
- Manual bypass switch (optional)

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#### Surge suppression

Meets ANSI/IEEE Standard C62.41-1991 (IEEE 537, category B3)

### Indicator lights

Three green indicators show the presence of regulated voltage on each phase. A fourth red light indicates an overtemperature condition

#### Over voltage protection

Automatic electronic shut down occurs if the output voltage exceeds ±10% for 6 seconds (adjustable)

Characteristics	Tama= 700		
Characteristics	Topaz 700		
Technology	Tap Changer		
Input voltage range	+10% to -20%		
Output voltage range	±3% Typical		
Input frequency range	47-53 Hz for 50 Hz models		
	57-63 Hz for 60 Hz models		
Efficiency	97% Typical, 95% minimum		
Load power factor	0.6 leading to 0.6 lagging		
Common-mode noise attenuation	140 dB		
Normal-mode noise attenuation	-3 dB @ 1000 HZ, -40dB per decade		
Total harmonic distortion	Less than 1% added		
Correction time	1 Cycle typical, 1.5 cycle maximum		
Overload rating:	200% for 10 seconds		
	1000% for 1 cycle		
Environment			
Audible noise	Less than 50dBA @1 meter (depending on size)		
Operating temperature	0°C to +40°C		
Altitude	Up to 10,000 ft		
Standards			
Safety agencies	UL 1012, CSA, FCC Cat. A		
Warranty			
Standard warranty	One year		

### **Options:**

- RRM2020 Regulation Range Monitor has above, below and normal LED indicator lights which indicate when the input is beyond the regulation range, or within the range.
- RBS202x Integral Manual Rotary Maintenance Bypass Switch Specific models numbers include:

RBS2020 - 10 to 15 kVA units RBS2021 - 25 to 30 kVA units RBS2022 - 45 to 125 kVA units RBS2023 - 150 kVA units RBS2024 - 225 to 300 kVA units

- REP2020 Remote Emergency Power Off Option (REPO) A remotely mounted pushbutton is provided with 50 feet of cable. The Shunt Trip option, STC2020, is required with this option.
- ▶ STC2020 Shunt Trip for Main Circuit Breaker Option.

- UOV2020 Under/Over Voltage Shutdown Option if the output exceeds preset values, the unit output will shut off electronically & illuminate a diagnostic light.
- PSO2020 Under/Over Voltage Shutdown with Loss of Power Shut Off-instead
  of disabling the output, this option will shunt trip the main circuit breaker if the
  output voltage exceeds preset values. The Shunt Trip option, STC2020, is
  required with this option.
- ▶ ERR1040 Extended Regulation Range Option provides +10% to -40% input regulation range for intermittent duty only. Output regulation is +5% to -6% from nominal with this option.

## **Topaz 700 Power Conditioners (Three Phase)**

Model #	kVA	Input volt	Output volt	Output distribution	Cabinet size (HxWxD in inches)	Weight (lbs)
_T010k	10	208/240/480	208Y/120	Hard-wire	30 x 21.5 x 29	440
_T015k	15	208/240/480	208Y/120	II .	II .	520
_T025k	25	208/240/480/600	II .	II	44 x 21.5 x 29	700
T030k	30	208/240/480/600	п	п	"	720
T045k	45	"	п	п	44 x 45 x 29	950
T050k	50	"	208/120-480/277	II .	II .	970
T075k	75	480/600	m m	II .	II .	1100
T100k	100	480/600	"	п	II .	1660
T125k	125	"	"	II .	II .	1980
T150k	150	ш	"	п	п	2200
T225k	225	"	"	п	77 x 56 x 41.5	3300
T300k	300	"	n n	II .	"	4000

Model # T\_\_ - 010k - \_ Frequency rating 6=60 Hz; 5=50 Hz

- ▶ 75-300kVA are available with 480V/600V input only. Requires an additional auto-transformer for lower input voltage
- ▶ For 50 Hz model cabinet dimensions call factory
- ▶ Listings UL listed, CSA Certified
- For output distribution option call factory
- ▶ k factor rated units available on request







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