



The UST SureVolt™ corrects electrical anomalies, allowing commercial, military, government and industrial facilities to safely and operate on grid voltage.





## About SureVolt™

SureVolt™ provides continuous power conditioning and protection for commercial, military, government and industrial facilities.

The UST SureVolt automatic voltage regulator provides tightly controlled continuous voltage through both transient and longer-term low or high voltage events, while balancing three-phase power.

The SureVolt combines a robust industry-leading overload capacity with a high speed electronic design which virtually eliminates maintenance.

The SureVolt provides high overload capacity for loads with large inrush-current requirements, while providing consistent voltage regulation and fast correction without regular maintenance or moving parts.



## Application

Size (kVA)	Single Phase	5, 10, 15, 20, 25, 30, 50, 75, 100, 150 (larger sizes available upon request)	
	3-Phase	5, 10, 15, 20, 25, 30, 50, 75, 100, 125, 150, 200, 250, 300, 350, 400, 500, 600, 750, 1,000, 1,250, 1,500, 1,750, 2,000, 2,500, 3000	
	Note	Standard configuration is an isolation transformer up to 500kVA. Auto-transformer is for units above 500kVA.	
Input / Output Voltages	1Ø/60Hz: 120, 208, 240, 480	1Ø/50Hz: 110, 220, 380, 400	Voltage step up or step down and non-standard voltages available upon request.
	3Ø/60Hz: 208, 240, 480, 600	3Ø/50Hz: 220, 380, 400, 415	

## Regulation / Operating Characteristics

Regulation Variation	Voltage Regulation Tolerance - 2%
Overload/Inrush Capability	1000% - 1 second, 500% - 5 seconds, 200% - 1 min.; 1000% fault clearing.
Minimum Load	No minimum load or part load limitations.
Load / Power Factor	No minimum or part load or power factor limitations, compatible with all load types.
Tap Switching	No load current interruption or waveform distortion on switching at any load or load power factor.
Zero Crossing Sensitivity	Tap switching not dependent upon determining load current zero crossing.
Phase Balancing	Each phase regulated independently
Harmonic Distortion	No distortion added at any load or load power factor.
Response Time	1 cycle typical, regardless of load or load power factor.
Efficiency	97% typical (isolation transformer); 99% typical (auto-transformer).
Operating Frequency	± 3% of nominal frequency.

## Noise Suppression/Load Protection

Noise Attenuation	150 dB at 100 kHz common mode; 65 dB at 100 kHz normal mode.
Surge Suppression	Included: complies with ANSI/IEEE C62.41, UL 1449.
Input Circuit Breaker	Included: standard, UL 489, ANSI/IEEE C22.2.
Failsafe Electronic Bypass	Auto-actuation on high temperature, over-current, or component failure with no loss of load.

## Construction

Technology	Electronically controlled tap-switching series transformer design.
Switching Semiconductors	Non-full power semiconductors. Individual SCRs are not required to carry full unit current.
Controls	Microprocessor-based control.
Cooling	Standard NEMA-1 indoor enclosure designed for natural convection cooling (contaminant-free, dry, clean air).
Copper wound transformer	Meets ANSI specifications.
Enclosure	NEMA-1 indoor is standard (optional custom indoor or outdoor enclosures also available).
Backlit LCD	Phase regulation and status indicators.

## Environmental Requirements

Temperature – Humidity	Ambient 32° to 104°F (0 to 40°C) – Relative humidity 0-95% non-condensing.
Operating Altitude	0 to 3,300 ft (1000m) - Typical derating of 0.3% for every 100M over 1000M.

# Power. Made Perfect.™

## UST SUREVOLT™ FEATURES

Fast voltage regulation corrects under/over voltage, sags and swells

High fault-clearing capacity permits reliable operation of other protective devices

Built-in surge suppression for surges and spikes

Line isolation minimizes transients

Transformer shielding reduces line noise to deliver clean power

Independent phase regulation corrects voltage imbalance

Input circuit breaker protects against damaging over-current and short circuits

Automatic failsafe electronic bypass keeps the load powered



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Utility Systems Technologies, Inc. (UST) is a world-leading designer and manufacturer of electronic voltage control and power conditioning products. UST's products are in use worldwide at hospitals, factories, refineries, embassies, data centers and other critical facilities, mitigating the risk of damaging electrical surges, sags and swells, bridging brownouts, and providing a safe connection to the local grid.