

# SATURN Series TRUE ON-LINE LOW FREQUENCY UPS

## SATURN True Online UPS 3/1P SP-ST 10-60 KVA



### THREE PHASE IN SINGLE PHASE OUT LOW FREQUENCY TRUE ON-LINE UPS

#### Features

- On Line Double Conversion Technology
- Advance IGBT Inverter Design
- Multiple CPU Intelligent Control
- Sine Wave Pulse Width Modulation (SPWM)
- Three Phase in-Single Phase Out
- Output Voltage 220 VAC  $\pm 1\%$
- True Sine Wave Output with Less than 3%THD
- 100% backup Guarantee with No Break-Power
- Built in Output Isolation Transformer
- Multiple Protection Function of Over-Voltage
- Over-Load Short Circuit and Over-Temperature
- Special Industrial Design, Ensure the Safety in Worse Environment
- Reliable, Filtering and Stable Sine Wave Output
- With Manual Bypass
- Cold Start with DC Function
- EMI/RFI and Power Line Noise Protection
- Key Parts with Redundant Design, Higher Reliability
- On line, Input, Output, Load, battery, Temperature, and Event Log LCD display
- TIS 1291-2545, CE/ EN62040
- ISO9001:2008 Certified Manufacturer
- Remote monitoring and SNMP (option)
- Power Manager Software supported in Novell/Unix System Window 95/98/NT/2000/ME/XP

#### Multiple CPU Intelligent Control :

Advanced multiple CPU intelligent control is one digital software processed by microprocessor, can precisely and integrally control UPS data, and provide with enough calculation capacity, so that UPS can be under the best operation at any time.

#### Advance IGBT Inverter Technology :

Combined advanced IGBT technology with high frequency wider-modulated technology (PWM), the technology can reduce systematic noise and power loss, so that customer can obtain high-quality power output and optimized efficiency under each operation load.

#### Intelligent By-Pass Switch :

UPS can automatically monitor public power voltage under by-pass circuit mode, if input voltage exceeds rated value  $-20\% \sim +15\%$ , it shall automatically terminate its voltage output so as to protect form loaded equipment and UPS it self.

#### Advance Phase-Balanced Technology :

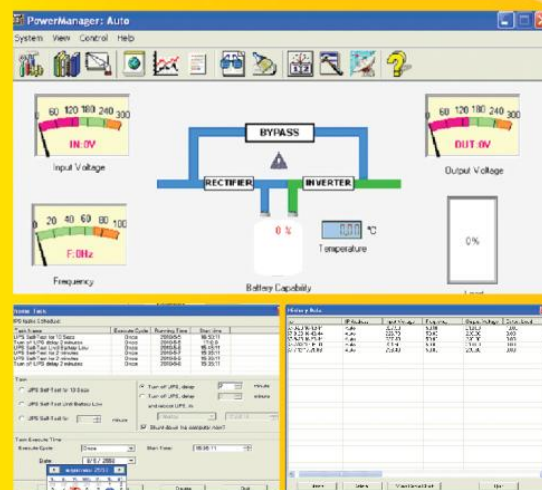
With most advanced phase-balanced technology now, it features best stability, even if loss-phase, it still operate at normal condition, especially in some worse power supply environment.

#### Battery Switch-On Function :

The device features its battery switch-on function, at no public power supply for UPS device, the battery can supply with power alternatively, and then provide with stable AC power output, thus more conveniently provide the customer with flexible solution for power supply.

### Power Manager

#### UPS Monitoring and Management Software



# SATURN True Online Liw Frequency UPS 3 Phase in/1P Out

## SP-ST Series Specification

Model		SP-ST 10K	SP-ST 15K	SP-ST 20K	SP-ST 30K	SP-ST 40K	SP-ST 50K	SP-ST 60K
Power Rating	KVA	10KVA	15KVA	20KVA	30KVA	40KVA	50KVA	60KVA
	KW	8KW	12KW	16KW	24KW	32KW	40KW	48KW
SYSTEM								
Control Technology	Microprocessor Control and Sine Wave Pulse Width Modulation (SPWM)							
INPUT SYSTEM								
Phase	3 Phase 4 wire +PE							
Voltage Range	380 VAC ± 25%							
Frequency	50 Hz ± 10%							
OUTPUT SYSTEM								
Voltage	220 VAC ± 1%							
Frequency	50 Hz ± 0.5%							
Wave Form	Pure sine wave							
Output Factor	0.8							
Efficiency	> 95%							
THD (%)	<3% Linear load, <5% Non linear load							
Case Factor	4:1							
PROTECTION SYSTEM								
Overload Capability	After the overload 125% for 120 Sec, 150% for 10 Sec then it automatic to bypass. Automatic recovery when load comes back to normal							
Short Circuit Protection	Current limits, Automatically shut down and without fuse switch protection							
Over Temperature	The internal temperature of UPS >85°C it will automatically to bypass							
Battery Protection	Automatically shut down when battery under voltage							
UPS Abnormal	Automatically to bypass mode							
AUDIBLE ALARM								
Battery Discharge	Alarm every 4 seconds when Power supply by battery and without main power Low battery alarm every one second, Low battery shutdown continuous alarm							
UPS Fault	Continuous alarm							
BATTERY								
Battery Type	Sealed lead acid maintenance free							
Battery Voltage	192 VDC				336 VDC			
Recharging Time	90% capacity after 8 hours							
INDICATOR								
LED display	Main, Inverter, Bypass, Overload, Battery and Fault							
LCD display	Operating Mode, Input, Output voltage, Frequency, Battery voltage, %Load, Temperature, Event Log and Fault							
COMMUNICATION INTERFACE								
Communication	RS-232/ SNMP (optional)							
Monitoring Function	Power, UPS Shutdown, UPS status, UPS self-test, Auto-save Files							
STANDARD								
SAFETY/EMC	EN62040-1/EN62040-2,EN55022,EN61000							
ENVIRONMENT								
Temperature	-10°C- 50 °C							
Humidity	0-93% (non-condensing)							
Audible Noise	< 60 dB (at 1 meter)						< 65 dB( at 1 meter)	
System Performance MTBF	300,000 Hrs.							
PHYSICAL								
W x D x H in mm.	624x345x1000				720x480x1160			
Weight (kg.)	160	180	200	280	320	410	470	

\* All specification are subject to change without prior notice.

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