UniStar® III

UniStar III Tower

- 1, 2, 3kva
- High Quality, Low Cost Single Phase UPS Online, Double-Conversion
- Three-year warranty

Benefits:

The UniStar III provides reliable protection against:

- Blackouts
- Voltage fluctuations
- Frequency fluctuations
- Harmonics, electrical noise, and brownouts.
- Almost unlimited backup run times with optional extended runtime battery cabinets

Features:

- Tower to Meet Your Installation Needs
- Easy Plug and Play Design (1 & 2 kVA Units)
- User Friendly Control Panel
- Precision Power Conditioning
- Smart Battery Management
- Remote Communications and Monitoring
- Optional External Battery Packs for Extended Runtime

This sophisticated, yet affordable UPS offers online technology and a wide input voltage range to provide a constant, clean, steady sinewave to equipment, even without going to battery mode.

The user friendly display clearly communicates the UPS status, making diagnostics a trouble-free task.

The included software also gives you the ability to remotely test major operating functions, access the UPS functions via the internet, and receive SMS alerts when specific events occur.

It is compatible with Novell NetWare, Linux, Free BSD, Windows 95/98, Windows NT, Windows XP, and other Windows operations.

An optional adapter card can give you the ability to run the

UPS through your local network.

UniStar® III Series

1, 2, & 3kVA
Tower Model

On-line, Single-phase UPS System

The UniStar® III is a sophisticated yet affordable single phase, double conversion UPS system. It offers on-line technology and a wide input-voltage range to provide a constant clean, steady sinewave to protect equipment, even without going to battery mode. It can instantly switch to battery, and its battery management system and easy, swappable battery packs make maintenance trouble free.

Full
Three Year
Warranty

STACO ENERGY PRODUCTS CO.

Your tailored power solutions provider

ISO Certified 9001:2000

UniStar® III Series On-line, Single-phase UPS System

Precision Power Conditioning

- Tight Voltage Regulation
- Frequency Isolation
- Good Harmonic Reduction
- Unity Power Factor Input, with .5 Lagging to Unity
- Short Circuit Protection
- Transient Protection
- Compact and lightweight

With true on-line performance and economically packaged with features our customers expect, the UniStar® III Tower is tailor-made for a wide variety of applications to protect sensitive equipment.

Three Year Warranty

Electronics:

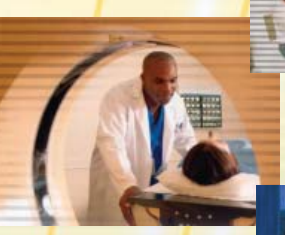
A full **Three Year** parts with depot repair or replacement warranty is standard.

Battery:

A full **One Year Warranty**, 4-year pro-rated, on the Battery System ensures **t**hat your batteries are protected from system failure now and in the future. *(Warranty provided by battery manufacturer.)*

Extended warranties, customized service plans and preventative maintenance are also available. *Please refer to our warranty statement for complete details.*

UniStar® III Series Tower Model



Applications

- Broadcast
- Computer Networks
- Retail
- Robotics
- Printing
- Medical/Pharmaceuticals
- Paper Productlon
- Food Processing

Features at a Glance

- Unity Input Power Factor for maximum efficiency
- Easy Maintenance and Swappable Battery
- Smart Battery Management
- Matching Battery Cabinets
- Complete Circuitry Protection
- Optional Automatic and Manual Bypass for Maintenance

Microprocessor Control

The UniStar®III's advanced microprocessor control gives you greater reliability, functionality and smaller size than other designs. The systems feature high overload handling without transfer to the bypass. You are also protected in case of short circuit or over-temperature conditions.

Easy Plug and Play Design

The UniStar®III is easy to install. Units up to 2kVA come standard with input cables and IEC output cables, so all you have to do is plug the unit into your utility power and plug the equipment you want protected into the back of the unit. Turn it on and you're done! Every UniStar®III unit automatically senses the operating frequency, and adjusts accordingly.

User Friendly Control Panel

The user friendly display clearly communicates the UPS status, and makes diagnostics a trouble free task. LED display panel provides indication and faults for such functions as utility, low battery, overload, along with a "push to test" feature. The UniStar®III allows for easy control and shutdown during a blackout, plus will let you remotely perform diagnostics with standard software.

Communications

The UniStar®III comes standard with shutdown software. The software gives you control of the UPS, and allows a graceful shutdown when the utility power fails, and gives you the ability to:

- Remotely test major operating functions of the UPS
- Communicate via SNMP/web/network (with adapter card)
- Access UPS functions via the web
- Receive SMS alerts when specific events occur

A standard RS232 interface or optional USB interface allow you to communicate with the UPS through a network or computer. The standard software is compatible with Novell NetWare, Windows 95/98, Windows NT, Windows XP, or other Windows operations, Linux, and Free BSD.

The UniStar®III also has SNMP adaptability through an optional SNMP card. Optional AS/400 or True Relay Interface cards also give the ability to remotely monitor the UPS using a variety of computing platforms.

STACO ENERGY PRODUCTS CO.

Your tailored power solutions provider

Communications Options

True Relay Card (P/N: SC-RELAY)
A 10-pin terminal is supported to offer the signals of Bypass, Utility Normal/Failure, Inverter On, Battery Low, Battery Bad, UPS Alarm, and UPS Shutdown.

AS/400 Card (P/N: SC-OPTO)
A DB9 port is supported to offer the signals of Bypass, Utility Normal/Failure, Inverter On, Battery Low, and UPS Shutdown.

WEB/SNMP Card (P/N: SC-SNMP1)
Integrates multi-network communication protocols to enable comprehensive, easy-to-understand and secure remote monitoring and management of the UPS via the Internet.

USB Card (P/N: SC-USB)
To provide an alternative USB communication port.

Batteries

Batteries are the most expensive component of a UPS system. Protect them and extend their life with the Smart Battery Management System (SBMS). SBMS continuously monitors battery status and recharges whenever necessary, so you have worry-free battery power.

Hot swappable batteries allow you to easily change batteries without shutting the UPS down. Matching battery cabinets make your UniStar® III look great and allow you easy battery access.

Battery Run Time Reference

UPS Size	Watt Charger	Part Number	Quantity Cabinets	25% Load	50% Load	75% Load	100% Load
I kVA	Internal	Internal	0	45	18	10	7
	N/A	SC-BP1000-00903NT	1	280	120	70	49
	N/A	SC-BP1000-00903NT	2	550	238	143	100
	N/A	SC-BP1000-00903NT	3	840	365	225	155
	N/A	SC-BP1000-00903NT	4	1150	505	400	215
2kVA	Internal	Internal	0	45	18	10	7
	N/A	SC-BP2000-01803NT	1	280	120	70	49
	N/A	SC-BP2000-01803NT	2	550	238	143	100
	N/A	SC-BP2000-01803NT	3	840	368	225	155
	N/A	SC-BP2000-01803NT	4	1150	525	310	215
3kVA	Internal	Internal	0	40	16	9	6
	N/A	SC-BP3000-01602NT	1	170	70	40	25
	N/A	SC-BP3000-01602NT	2	320	135	80	40
	N/A	SC-BP3000-01602NT	3	480	205	125	85
	N/A	SC-BP3000-01602NT	4	650	280	170	120
	200	SC-BP3000-23204CT	1	320	135	80	55
	200	SC-BP3000-23204CT	2	650	280	170	120
	200	SC-BP3000-23204CT	3	1005	440	270	190
	200	SC-BP3000-23204CT	4	1375	605	370	260

Physical Data

Model	Part Number	Dimensions, Inches H x W x D (mm)	Wt. lbs (kg)	Input Power Cord (6')	Output Receptacles
1 kVA, 120 Vac	SC10001T	9.2 x 5.8 x 15.8 (233 x 147 x 401)	33 (15)	5-15P	4 ea 5-15R
2 kVA, 120 Vac	SC20001T	14.4 x 5.2 x 18.9 (365 x 130 x 479)	60 (28)	5-20P	4 ea 5-15R, 2 ea 5-20R
3 kVA, 120 Vac	SC30001T	14.4 x 7.5 x 17.9 (365 x 190 x 453)	79 (33)	L5-30P	6 ea 5-15R, 2 ea 5-20R
1 kVA, 230 Vac	SC10001T	9.2 x 5.8 x 15.8 (233 x 147 x 401)	33 (15)	10A IEC320-C14	4 ea 10A IEC320-C13
2 kVA, 230 Vac	SC20002T	14.4 x 5.2 x 18.9 (365 x 130 x 479)	60 (28)	10A IEC320-C14	6 ea 10A IEC320-C13
3 kVA, 230 Vac	SC30003T	14.4 x 7.5 x 17.9 (365 x 190 x 453)	79 (33)	16A IEC320-C20	6 ea 10A IEC320-C13

UniStar® III 1kVA, 2kVA & 3kVA

Model	1,000 VA	2,000 VA	3,000 VA
INPUT			
Voltage (Vac)	80 - 140 or 160 - 280		
Frequency	50/60 +/- 5% (auto sensing)		
Phase	Single		
Input Power Factor	>.98 (full load)		
OUTPUT			
Voltage (VAC)	120 or 240 Vac Consult factory for 100/110 or 220/230 voltages, available through factory software.		
Capacity (VA/W)	1000VA/700W	2000VA/1400W	3000VA/2100W
Rated Power Factor	0.7 lagging		
Load Power Factor Range	0.5 lagging to unity within kW rating of unit		
Wave Form	Sine wave, THD <3% (no load to full load)		
Voltage Regulation	+/- 2%		
Transient Response (ms)	+/- 4% under full load, change and corrected within 60 ms		
Frequency Stability	+/- 5% Hz (free running)		
Synchronization	Slew Rate: 1 Hz/sec. max. synchronizing window +/-5%		
Transfer Time	0 ms		
Crest Factor	3:1		
Run-time (Full Load)	>7 min.	>7 min.	>6 min.
DC Start	Yes		
DISPLAY			
LED Indicators	Utility, Battery low, Inverter, Bypass, Test OK, Overload fault, Load/Battery level, and Fault Conditions		
Self Diagnostics	On-demand push button		
ALARMS			
Audible and Visual	Line failure, Battery low, Transfer to bypass, Overload, System fault conditions		
ENVIRONMENTAL			
Operating Temperature	0° C - 40° C		
Altitude	0 - 2,000 m up to 40° C. 3,000 m up to 35° C.		
Humidity	90% RH maximum, non-condensing		
Noise	< 45 dB at 1 meter		
SAFETY CONFORMANCE			
Quality Assurance	ISO 9001:2000 certified company		
Safety Standard	EN500091-1, UL1778		
EMC Standard	EN500091-2, EN61000-3-2, EN61000-3-3, FCC class A		
Agency Marks	UL, c-UL, CE		
BATTERY			
Type	Sealed lead acid maintenance free 12 Vdc 7.2 AHr		
Quantity per string (pcs)	3	6	8
Voltage (VDC)	36	72	96
Recharge Time	8 hours to 90%		
Optional Charger	200W for extended backup applications, reference battery run chart on previous page		