

## Staco V Series 120/120VAC Universal Tower/Rack Mount Standard 1000VA, 1500VA, 2000VA & 3000VA

XL Extended Models 900VA, 1250VA, 1700VA & 2500VA

## **On-line, Single Phase, Double Conversion UPS**

The Staco V features a field-proven Digital Signal Processor (DSP) achieving high reliability, while providing protection from electrical power disturbances to the connected load. The convertible tower/rack design offers maximum flexibility, enabling UPS integration into a wide variety of environments.

Industry-leading functionality is standard and includes hot swappable battery, powerful internal charger, emergency shut-down and programmable receptacles. The Staco V is an ideal power protection solution for servers, networks, telecommunications, industrial equipment, and manufacturing processes. XL Models are for those critical applications that require extended battery backup times.

## True Double-Conversion On-Line UPS

A true double conversion UPS will provide clean, high level quality power to fully protect mission-critical devices such as sensitive networks, small computer center servers, telecom applications, as well as for industrial applications.

## **Output Power Factor 0.9**

• Staco V Series is a high-density UPS with an output power factor 0.9 to provide higher performance and efficiency to critical applications.

## **User-Friendly and Easy-Shift LCD Display**

 The front panel digital display can be easily shifted through LCD setting to suit the installation format, Tower or Rack mount

## **Rack/Tower Design**

■ The Series V is designed in a true universal-mount case. It can be easily installed as a free-standing tower or in a 19-inch rackmount configuration.

## **Programmable Power Management Outlets**

• With programmable power management outlets, users can easily and independently control load segments. During power failure, this feature enables users to extend battery time to mission-critical devices by shutting down the non-critical devices.

## 50/60 Hz Frequency Converter Mode

• Lock output frequency at 50Hz or 60Hz to suit power sensitive equipment.

## **ECO and Advanced ECO Mode for Energy Saving**

• It allows the UPS to operate in high efficiency up to 97% in energy-saving ECO mode. In this operation mode, load is supplied by the mains. In the event of a mains failure, the inverter takes over the load and provides supply continuity to the connected systems. The Series V even offers advanced ECO mode to allow UPS to operate at higher efficiency up to 98%.

## **Emergency Power Off Function (EPO)**

• This feature can secure the personnel and equipment in case of fires or other emergencies.

## **Hot-Swappable Battery Design**

Ensures clean and uninterruptible power to protected equipment during battery replacement.



## **Applications**

- Broadcast
- Processing Manufacturing (food/beverage, pharmaceutical, plastics, packaging)
- Water and Waste Water Treatment
- Hospitals/Medical
- Education/Research Laboratories

# On-Line, Single Phase UPS System

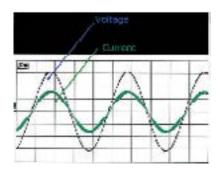
The Staco V represents the latest in single-phase technology at an affordable price. Its true on-line performance provides a constant clean, steady sine wave safeguarding the most sensitive equipment.

## **Double Conversion**

The UPS provides clean AC power with voltage and frequency independent from the utility. On-line technology completely regenerates utility power to correct electrical disturbances in the mains.

## **High-Efficiency and Protection**

PWM sine-wave topology yields excellent overall performance. The high crest factor of the inverter handles all high in-rush current loads without the need to upgrade the power rating.



Wide frequency and voltage windows of 40-70Hz and 55-150Vac (for 120Vac input), or 110-300Vac (for 230Vac input), are provided, which help to extend the life of the battery.

Near unity input power factor meets today's industry standard for energy savings and efficiency with low current harmonic pollution to the utility.

To protect the unit from overloading, the UPS will automatically switch to bypass mode in 30 seconds if loading is at 105%~120% of rated capacity. It will automatically switch back to inverter mode once overload condition ceases. Selectable bypass input voltage tolerance (low/high sensitivity) prevents under or over voltage being

supplied to the loads while in bypass mode.

#### **User Controls**

An easy-to-read user-friendly LCD display provides real-time indication of all major system parameters and status, including load level, battery remaining, and fault signals for easy service.



Digital signal processing (DSP) also provides the UPS with powerful communication capability, which enhances the flexibility for easy remote control and monitoring.

#### **Features**

**DC-start function** ensures the start-up of UPS even during power outages.

**Programmable receptacles** offer the capability to load shed during any power interruption, while in battery power mode or during overload condition, via the use of special communication software provided, thus reserving backup power for priority loads.

**Emergency shutdown control** through EPO allows users to shutdown the UPS completely in an emergency to ensure a safe operating environment.

**Communication software** allows not only the control of the UPS and its smooth shutdown when utility fails, but also allows the user to:

- Completely test the major operating functions of the UPS
- Communicate via SNMP/Web/ Network adapter
- Access UPS functions via the Web
- Alert users via SMS messages against specific events

**Custom options slot** allows further flexibility in network configuration.

An internal WEB/SNMP card, USB card, and True Relay card provide isolated contacts for industrial and remote alarm panel application.

## User-friendly Plug-and-Play design

allows hassle-free installation. All units up to 3000VA are supplied with input cables and output receptacles as standard.

## Innovative battery management cir-

**cuit** analyzes battery discharging status to adjust battery cut-off point and extend the batteries' life span.

## Internal maintenance-free sealed VRLA

**batteries** minimizes the need for frequent after-sales service. The hot swappable battery feature allows users to replace the batteries without the hazard of electric shock, while the UPS supplies power continuously to critical load applications.

**Built-in Charger** provides ability to re-charge internal battery to approximately 90% in four hours. Matching battery cabinets are available to extend the UPS runtime easily to several hours.

#### **Optional extended runtime**

**capability** by simply connecting additional battery packs. Just plug in the battery connectors between the UPS and battery packs without the requirement for additional chargers.

Extended run time battery packs are available for all models.

Size, capacity, and estimated run times

are shown in the table below. Backup time is for the battery pack used with the UPS internal batteries. Battery packs are external and hot swappable.

#### **Optional Power Distribution Unit -**

**SCV-ST** provides a comprehensive feature set on its standard products usually found only on more expensive or custom products.

## **Three Year Warranty**

#### **Electronics:**

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

#### **Battery:**

A full **One Year Warranty** on the Battery System ensures that 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.



## Staco V Series, Universal Rack/Tower Mount 120VAC, 1000VA, 1500VA, 2000VA & 3000VA & LB Models, 900VA, 1250VA, 1700VA & 2500VA

UPS On-line, Double-Conversion – LCD Panel, USB and RS-232 Standard

VA/ Watts	Internal Battery (Minutes)	Input Cord	Output Connection	*Dimensions H" x W" x D" / [mm]	*Wt. lbs. / (kg)
1000VA / 900W	4	5-15P	(4) 5-15R	3.39" x 17.24" x 16.44" (2U) [86.2 x 438.0 x 417.5]	29 / (13)
1500VA / 1350W	4	5-15P	(4) 5-15R	3.39" x 17.24" x 20.38" (2U) [86.2 x 438.0 x 517.5]	42 / (19)
2000VA / 1800W	4	5-20P	(8) 5-20R	3.39" x 17.24" x 20.38" (2U) [86.2 x 438.0 x 517.5]	47 / (21)
3000VA / 2700W	4	L5-30P	(4) 5-20R & (1) L5-30R	3.39" x 17.24" x 27.74" (2U) [86.2 x 438.0 x 704.6]	65 / (29)
900VA / 810W	0	5-15P	(4) 5-15R	3.39" x 17.24" x 16.44" (2U) [86.2 x 438.0 x 417.5]	20 / (9)
1250VA / 1125W	0	5-15P	(4) 5-15R	3.39" x 17.24" x 20.38" (2U) [86.2 x 438.0 x 517.5]	26 / (12)
1700VA /1530W	0	5-20P	(8) 5-20R	3.39" x 17.24" x 20.38" (2U) [86.2 x 438.0 x 517.5]	28 / (13)
2500VA / 2250W	0	L5-30P	(4) 5-20R & (1) L5-30R	3.39" x 17.24" x 27.74" (2U) [86.2 x 438.0 x 704.6]	33 / (15)
	Watts  1000VA / 900W  1500VA / 1350W  2000VA / 1800W  3000VA / 2700W  900VA / 810W  1250VA / 1125W  1700VA /1530W	Watts Battery (Minutes) 1000VA / 900W 4 1500VA / 1350W 4 2000VA / 1800W 4 3000VA / 2700W 4 900VA / 810W 0 1250VA / 1125W 0 1700VA / 1530W 0	Watts Battery (Minutes) 1000VA / 900W 4 5-15P 1500VA / 1350W 4 5-15P 2000VA / 1800W 4 5-20P 3000VA / 2700W 4 L5-30P 900VA / 810W 0 5-15P 1250VA / 1125W 0 5-15P 1700VA / 1530W 0 5-20P	VAI Watts         Battery (Minutes)         Input Cord         Output Connection           1000VA / 900W         4         5-15P         (4) 5-15R           1500VA / 1350W         4         5-15P         (4) 5-15R           2000VA / 1800W         4         5-20P         (8) 5-20R           3000VA / 2700W         4         L5-30P         (4) 5-20R & (1) L5-30R           900VA / 810W         0         5-15P         (4) 5-15R           1250VA / 1125W         0         5-15P         (4) 5-15R           1700VA / 1530W         0         5-20P         (8) 5-20R           2500VA / 2250W         0         L5-30P         (4) 5-20R &	Watts         Battery (Minutes)         Input Cond         Output Connection         H" x W" x D" / [mm]           1000VA / 900W         4         5-15P         (4) 5-15R         3.39" x 17.24" x 16.44" (2U) [86.2 x 438.0 x 417.5]           1500VA / 1350W         4         5-15P         (4) 5-15R         3.39" x 17.24" x 20.38" (2U) [86.2 x 438.0 x 517.5]           2000VA / 1800W         4         5-20P         (8) 5-20R         3.39" x 17.24" x 20.38" (2U) [86.2 x 438.0 x 517.5]           3000VA / 2700W         4         L5-30P         (4) 5-20R & (1) L5-30R         3.39" x 17.24" x 27.74" (2U) [86.2 x 438.0 x 704.6]           900VA / 810W         0         5-15P         (4) 5-15R         3.39" x 17.24" x 16.44" (2U) [86.2 x 438.0 x 517.5]           1250VA / 1125W         0         5-15P         (4) 5-15R         3.39" x 17.24" x 20.38" (2U) [86.2 x 438.0 x 517.5]           1700VA /1530W         0         5-20P         (8) 5-20R         3.39" x 17.24" x 20.38" (2U) [86.2 x 438.0 x 517.5]           2500VA / 2250W         0         L5-30P         (4) 5-20R & 3.39" x 17.24" x 27.74" (2U)

Standard Models: Maximum (1) External Battery Pack (V1000EBC, V1500EBC, V2000EBC or V3000EBC) XL Models: Maximum (5) External Battery Pack (V1000EBC, V1500EBC, V2000EBC or V3000EBC)

- lote: 1. XL Models do not have internal batteries
  - 2. Unit ships with bundled NetAgent 9 Shutdown Software.
  - 3. All units ship with floor stand and rack mount hardware.

<sup>\*</sup>Always reference Spec Control Drawing (SCD) for the most current & accurate dimensions and weights

## **Specification for 120/120VAC**

MODEL		V1000RT120	V1000RTXL120	V1500RT120	V1500RTXL120	V2000RT120	V2000RTXL120	V3000RT120	V3000RTXL120		
PART NUM	MBER	SCV-10001	SCV-10001-LB	SCV-15001	SCV-15001-LB	SCV-20001	SCV-20001-LB	SCV-30001	SCV-30001-LB		
Capacity	VA / Watts	1000 VA	900 VA	1500 VA	1250 VA	2000 VA	1700 VA	3000 VA	2500 VA		
INPUT		900 W	810W	1350 W	1125 W	1800 W	1530 W	2700 W	2250 W		
INPUT	Rated Volts				100\/∆	.C-120VAC					
		100VAC-120VAC Low Voltage 80 VAC/70 VAC/60 VAC/55 VAC ± 5 %									
	Low Transfer	(based on load percentage 100%-80% / 80%-70% / 70%-60% / 60%-0)									
Capacity	Re-Transfer			Low Voltag	e Re-Transfer 85 V	AC/75 VAC/65 VAC	C/60 VAC ± 5 %				
	High Transfer	High Voltage 150 VAC ± 5 %									
	Re-Transfer				High Voltage Re-T	ransfer 142 VAC ±	5 %				
Frequenc	cy Range	50Hz/ 60Hz									
Power Fa	actor				≥0.99 @n	ominal voltage					
OUTPUT	-										
Output Vo	oltage				100*/110*	/115*/120VAC					
AC Voltag	ge Regulation				:	± 1%					
Frequenc	cy Range			47	~ 53 Hz or 57 ~ 63	Hz (Synchronized	Range)				
Frequenc	cy Range				50Hz ± 0.5% or 60	Hz ± 0.5% (Bat. M	ode)				
Current C	Crest Ratio (CF)				5:1	(max.)					
	c Distortion					Linear load)					
(THDU)	AC to DC					mode before shut o	lown)				
Transfer Time						Zero (Typical)					
	Inv. to Bypass					( )1 /					
	n (Battery Mode)				Pure	Sinewave					
EFFICIE		ı		D ==== ( 1)							
AC Mode				l), 88% (peak)				l), 90% (peak)			
Battery M			83% (typica	l), 86% (peak)			85% (typica	l), 88% (peak)			
BATTER	Y (NON-LB MODE	LS)							r		
Battery T	уре	(2) 12V/9Ah	No Internal	(3) 12V/9Ah	No Internal	(4) 12V/9Ah	No Internal	(6) 12V/9Ah	No Internal		
Battery Time (Full Load)		4	0	4	0	4	0	4	0		
Typical Recharge Time				4 hours	recover to 90% cap	pacity (for Non-LB	models only)				
Charging	Current (max.)	1 Amp	6 Amp	1 Amp	6 Amp	1 Amp	6 Amp	1 Amp	6 Amp		
Charging	Voltage	27.4 VDC ± 1% 41.1 VDC ± 1% 54.7 VDC ± 1%						82.1VE	OC ± 1%		
LCD DIS	PLAY										
Status		Load level 0-25 UPS in Frequer	%, 26-50%, 51-75 ncy Converter Mod	% and 76-100%, I de, UPS On Bypas	ow Battery and Bas, Alarm Disabled	attery Good, Progra Indicator and Batte	ammable Manager ery Charger Workir	ment Outlets working.	ıg, UPS On-Line		
Readings	3		nd Frequency, Out tput is short circuit		equency, Battery E	Backup Time (hours	s/minutes), Fault In	ndicator, Battery Vol	tage, Overload,		
Control/S	Select Buttons	Off/Enter - Turn	UPS Off, Switch I	_CD Message, Mo	de Settings, Navig	ation Key, On/Mute	+ Select Button to	switch to Bypass	Mode.		
AUDIRI F	E & VISUAL ALAR	1									
		MS									
	Indicators			nected, Overcharge, S	Site Wiring Fault, EPO	Enabled, Over Tempe	rature, Charger Failure	e, Battery Fault, Bypass	Out of Range and		
Warning		Low battery, Overlo Bypass Frequency	/ Unstable	nected, Overcharge, S	Site Wiring Fault, EPO	Enabled, Over Tempe	rature, Charger Failure	e, Battery Fault, Bypass	Out of Range and		
Warning	Indicators	Low battery, Overle Bypass Frequency MENSIONS H" x 3.39" x 17.24	/ Unstable W" x D" / [mm] " x 16.44" (2U)	3.39" x 17.24	" x 20.38" (2U)	3.39" x 17.24	' x 20.38" (2U)	3.39" x 17.24	" x 27.74" (2U)		
Warning **PHYSI	Indicators	Low battery, Overle Bypass Frequence MENSIONS H" x 3.39" x 17.24 [86.2 x 43 17.24" x 3.39	Vunstable W" x D" / [mm] " x 16.44" (2U) 8.0 x 417.5] " x 16.44" (2U)	3.39" x 17.24 [86.2 x 438 17.24" x 3.39	" x 20.38" (2U) 3.0 x 517.5] " x 20.38" (2U)	3.39" x 17.24' [86.2 x 438 17.24" x 3.39'	' x 20.38" (2U) 3.0 x 517.5] ' x 20.38" (2U)	3.39" x 17.24 [86.2 x 43] 17.24" x 3.39	" x 27.74" (2U) 8.0 x 704.6] " x 27.74" (2U)		
Warning  **PHYSI Rack Mon Tower	Indicators CAL WEIGHT & DI unt	Low battery, Overl Bypass Frequency MENSIONS H" x 3.39" x 17.24 [86.2 x 43 17.24" x 3.39 [438.0 x 8	/ Unstable / W" x D" / [mm]   " x 16.44" (2U)   8.0 x 417.5]   " x 16.44" (2U)   6.2 x 417.5]	3.39" x 17.24 [86.2 x 43/ 17.24" x 3.39 [438.0 x 8/	" x 20.38" (2U) 3.0 x 517.5] " x 20.38" (2U) 3.2 x 517.5]	3.39" x 17.24 [86.2 x 436 17.24" x 3.39 [438.0 x 86	' x 20.38" (2U) 3.0 x 517.5] ' x 20.38" (2U) 3.2 x 517.5]	3.39" x 17.24 [86.2 x 43/ 17.24" x 3.39 [438.0 x 8/	" x 27.74" (2U) 3.0 x 704.6] " x 27.74" (2U) 6.2 x 517.5]		
Warning  **PHYSIO  Rack Moo  Tower  Net Weig	Indicators  CAL WEIGHT & DI  unt  ht lbs. / (kg)	Low battery, Overl Bypass Frequency MENSIONS H" x 3.39" x 17.24 [86.2 x 43 17.24" x 3.39 [438.0 x 8 29 / (13)	Vunstable W" x D" / [mm] " x 16.44" (2U) 8.0 x 417.5] " x 16.44" (2U)	3.39" x 17.24 [86.2 x 438 17.24" x 3.39	" x 20.38" (2U) 3.0 x 517.5] " x 20.38" (2U)	3.39" x 17.24' [86.2 x 438 17.24" x 3.39'	' x 20.38" (2U) 3.0 x 517.5] ' x 20.38" (2U)	3.39" x 17.24 [86.2 x 43] 17.24" x 3.39	" x 27.74" (2U) 8.0 x 704.6] " x 27.74" (2U)		
Warning  **PHYSIO Rack Mon Tower Net Weig ENVIROI	Indicators  CAL WEIGHT & DI  unt  tht lbs. / (kg)  NMENT (Electroni	Low battery, Overl Bypass Frequency MENSIONS H" x 3.39" x 17.24 [86.2 x 43 17.24" x 3.39 [438.0 x 8 29 / (13)	/ Unstable / W" x D" / [mm]   " x 16.44" (2U)   8.0 x 417.5]   " x 16.44" (2U)   6.2 x 417.5]	3.39" x 17.24 [86.2 x 43/ 17.24" x 3.39 [438.0 x 8/	" x 20.38" (2U) 3.0 x 517.5] " x 20.38" (2U) 3.2 x 517.5] 26 / (12)	3.39" x 17.24 [86.2 x 438 17.24" x 3.39 [438.0 x 86 47 / (21)	' x 20.38" (2U) 3.0 x 517.5] ' x 20.38" (2U) 3.2 x 517.5]	3.39" x 17.24 [86.2 x 43/ 17.24" x 3.39 [438.0 x 8/	" x 27.74" (2U) 3.0 x 704.6] " x 27.74" (2U) 6.2 x 517.5]		
Warning  **PHYSIC Rack Mon Tower Net Weig ENVIROI Operating	Indicators  CAL WEIGHT & DI unt  tht lbs. / (kg)  NMENT (Electronic	Low battery, Overl Bypass Frequency MENSIONS H" x 3.39" x 17.24 [86.2 x 43 17.24" x 3.39 [438.0 x 8 29 / (13)	/ Unstable / W" x D" / [mm]   " x 16.44" (2U)   8.0 x 417.5]   " x 16.44" (2U)   6.2 x 417.5]	3.39" x 17.24 [86.2 x 43/ 17.24" x 3.39 [438.0 x 8/	" x 20.38" (2U) 3.0 x 517.5] " x 20.38" (2U) 3.2 x 517.5] 26 / (12)	3.39" x 17.24 [86.2 x 436 17.24" x 3.39 [438.0 x 86 47 / (21) to 104°F (40°C)	' x 20.38" (2U) 3.0 x 517.5] ' x 20.38" (2U) 3.2 x 517.5]	3.39" x 17.24 [86.2 x 43/ 17.24" x 3.39 [438.0 x 8/	" x 27.74" (2U) 3.0 x 704.6] " x 27.74" (2U) 6.2 x 517.5]		
Warning  **PHYSIC Rack Mon Tower Net Weig ENVIROI Operating Humidity	Indicators  CAL WEIGHT & DI unt  tht lbs. / (kg)  NMENT (Electronic	Low battery, Overl Bypass Frequency MENSIONS H" x 3.39" x 17.24 [86.2 x 43 17.24" x 3.39 [438.0 x 8 29 / (13)	/ Unstable / W" x D" / [mm] " x 16.44" (2U) 8.0 x 417.5] " x 16.44" (2U) 6.2 x 417.5] 20 / (9)	3.39" x 17.24 [86.2 x 43i 17.24" x 3.39 [438.0 x 8i 42 / (19)	" x 20.38" (2U) 3.0 x 517.5] " x 20.38" (2U) 6.2 x 517.5] 26 / (12) 32°F (0°C) 20-90 % RH	3.39" x 17.24 [86.2 x 438 17.24" x 3.39 [438.0 x 86 47 / (21) to 104°F (40°C) (non-condensing)	' x 20.38" (2U) 3.0 x 517.5] ' x 20.38" (2U) 6.2 x 517.5] 28 / (13)	3.39" x 17.24 [86.2 x 43i 17.24" x 3.39 [438.0 x 8i 65 / (29)	" x 27.74" (2U) 3.0 x 704.6] " x 27.74" (2U) 5.2 x 517.5]		
Warning  **PHYSIC Rack Moo Tower Net Weig ENVIROI Operating Humidity Storage	Indicators  CAL WEIGHT & DI  unt  int lbs. / (kg)  NMENT (Electronic	Low battery, Overl Bypass Frequency MENSIONS H" x 3.39" x 17.24 [86.2 x 43 17.24" x 3.39 [438.0 x 8 29 / (13)	/ Unstable / W" x D" / [mm] " x 16.44" (2U) 8.0 x 417.5] " x 16.44" (2U) 6.2 x 417.5] 20 / (9)	3.39" x 17.24 [86.2 x 43i 17.24" x 3.39 [438.0 x 8i 42 / (19)	" x 20.38" (2U) 3.0 x 517.5] " x 20.38" (2U) 3.2 x 517.5] 26 / (12) 32°F (0°C) 20-90 % RH 04°F (40°C) <b>BATTI</b>	3.39" x 17.24" [86.2 x 434] 17.24" x 3.39 [438.0 x 86] 47 / (21) to 104°F (40°C) (non-condensing)	' x 20.38" (2U) 3.0 x 517.5] ' x 20.38" (2U) 6.2 x 517.5] 28 / (13)	3.39" x 17.24 [86.2 x 43i 17.24" x 3.39 [438.0 x 8i 65 / (29)	" x 27.74" (2U) 3.0 x 704.6] " x 27.74" (2U) 5.2 x 517.5]		
Warning  **PHYSIC Rack More Tower  Net Weig ENVIROP Operating Humidity Storage Noise Lev	Indicators  CAL WEIGHT & DI  unt  int lbs. / (kg)  NMENT (Electronic	Low battery, Overl Bypass Frequency MENSIONS H" x 3.39" x 17.24 [86.2 x 43 17.24" x 3.39 [438.0 x 8 29 / (13)	/ Unstable / W" x D" / [mm] " x 16.44" (2U) 8.0 x 417.5] " x 16.44" (2U) 6.2 x 417.5] 20 / (9)	3.39" x 17.24 [86.2 x 43i 17.24" x 3.39 [438.0 x 8i 42 / (19)	" x 20.38" (2U) 3.0 x 517.5] " x 20.38" (2U) 3.2 x 517.5] 26 / (12) 32°F (0°C) 20-90 % RH 04°F (40°C) <b>BATTI</b>	3.39" x 17.24 [86.2 x 438 17.24" x 3.39 [438.0 x 86 47 / (21) to 104°F (40°C) (non-condensing)	' x 20.38" (2U) 3.0 x 517.5] ' x 20.38" (2U) 6.2 x 517.5] 28 / (13)	3.39" x 17.24 [86.2 x 43i 17.24" x 3.39 [438.0 x 8i 65 / (29)	" x 27.74" (2U) 3.0 x 704.6] " x 27.74" (2U) 5.2 x 517.5]		
Warning ***PHYSIC Rack Mon Tower Net Weig ENVIROI Operating Humidity Storage Noise Let MANAGE	Indicators  CAL WEIGHT & DI  unt  tht lbs. / (kg)  NMENT (Electronic)  g  vel  EMENT / COMMUN	Low battery, Overl Bypass Frequency MENSIONS H" x 3.39" x 17.24 [86.2 x 43 17.24" x 3.39 [438.0 x 8 29 / (13)	/ Unstable / W" x D" / [mm] " x 16.44" (2U) 8.0 x 417.5] " x 16.44" (2U) 6.2 x 417.5] 20 / (9)	3.39" x 17.24 [86.2 x 43i 17.24" x 3.39 [438.0 x 8i 42 / (19)	" x 20.38" (2U) 3.0 x 517.5] " x 20.38" (2U) 3.2 x 517.5] 26 / (12) 32°F (0°C) 20-90 % RH 04°F (40°C) <b>BATTI</b> Less than 50	3.39" x 17.24" [86.2 x 434] 17.24" x 3.39 [438.0 x 86] 47 / (21) to 104°F (40°C) (non-condensing) ERIES (REFRESH 0dBA @ 1 Meter	' x 20.38" (2U) 3.0 x 517.5] ' x 20.38" (2U) 5.2 x 517.5] 28 / (13) Charge @ 3 mon	3.39" x 17.24 [86.2 x 43: 17.24" x 3.39 [438.0 x 8: 65 / (29)	" x 27.74" (2U) 3.0 x 704.6] " x 27.74" (2U) 5.2 x 517.5]		
Warning  ***PHYSIC Rack Moor Tower Net Weig ENVIRO Operating Humidity Storage Noise Lev MANAGE Smart RS	Indicators  CAL WEIGHT & DI unt  unt  (ht lbs. / (kg)  NMENT (Electronic g  vel  EMENT / COMMUN  5-232/USB	Low battery, Overl Bypass Frequency MENSIONS H" x 3.39" x 17.24 [86.2 x 43 17.24" x 3.39 [438.0 x 8 29 / (13)	/ Unstable / W" x D" / [mm] " x 16.44" (2U) 8.0 x 417.5] " x 16.44" (2U) 6.2 x 417.5] 20 / (9)	3.39" x 17.24 [86.2 x 43i 17.24" x 3.39 [438.0 x 8i 42 / (19)	"x 20.38" (2U) 3.0 x 517.5] "x 20.38" (2U) 3.2 x 517.5] 26 / (12)  32°F (0°C) 20-90 % RH 04°F (40°C) BATTI Less than 56	3.39" x 17.24" [86.2 x 43i 17.24" x 3.39 [438.0 x 8i 47 / (21) to 104°F (40°C) (non-condensing) ERIES (REFRESH 0dBA @ 1 Meter	' x 20.38" (2U) 3.0 x 517.5] ' x 20.38" (2U) 5.2 x 517.5] 28 / (13)  Charge @ 3 mon	3.39" x 17.24 [86.2 x 43: 17.24" x 3.39 [438.0 x 8: 65 / (29)	" x 27.74" (2U) 3.0 x 704.6] " x 27.74" (2U) 5.2 x 517.5]		
Warning  ***PHYSIC Rack Moor Tower Net Weig ENVIRO Operating Humidity Storage Noise Lev MANAGE Smart RS Optional	Indicators  CAL WEIGHT & DI unt  unt  (ht lbs. / (kg)  NMENT (Electronic g  vel  EMENT / COMMUN  S-232/USB  SNMP Card	Low battery, Overl Bypass Frequency MENSIONS H" x 3.39" x 17.24 [86.2 x 43 17.24" x 3.39 [438.0 x 8 29 / (13)	/ Unstable / W" x D" / [mm] " x 16.44" (2U) 8.0 x 417.5] " x 16.44" (2U) 6.2 x 417.5] 20 / (9)	3.39" x 17.24 [86.2 x 43i 17.24" x 3.39 [438.0 x 8i 42 / (19)	"x 20.38" (2U) 3.0 x 517.5] "x 20.38" (2U) 5.2 x 517.5] 26 / (12)  32°F (0°C) 20-90 % RH 04°F (40°C) BATTI Less than 56 dows 2000/2003/XF anagement from Si	3.39" x 17.24" [86.2 x 43i 17.24" x 3.39 [438.0 x 8i 47 / (21) to 104°F (40°C) (non-condensing) ERIES (REFRESH 0dBA @ 1 Meter P/Vista/2008/7, Lin NMP manager and	' x 20.38" (2U) 3.0 x 517.5] ' x 20.38" (2U) 5.2 x 517.5] 28 / (13)  Charge @ 3 mon  ux, Unix, and MAC web browser	3.39" x 17.24 [86.2 x 43: 17.24" x 3.39 [438.0 x 8: 65 / (29)	" x 27.74" (2U) 3.0 x 704.6] " x 27.74" (2U) 5.2 x 517.5]		
Warning  ***PHYSIC Rack Moor Tower Net Weig ENVIRO Operating Humidity Storage Noise Lev MANAGE Smart RS Optional Optional	Indicators  CAL WEIGHT & DI unt  unt  tht lbs. / (kg)  NMENT (Electronic g  vel  EMENT / COMMUN 5-232/USB  SNMP Card  MODBUS Card	Low battery, Overl Bypass Frequency MENSIONS H" x 3.39" x 17.24 [86.2 x 43 17.24" x 3.39 [438.0 x 8 29 / (13)	/ Unstable / W" x D" / [mm] " x 16.44" (2U) 8.0 x 417.5] " x 16.44" (2U) 6.2 x 417.5] 20 / (9)	3.39" x 17.24 [86.2 x 43i 17.24" x 3.39 [438.0 x 8i 42 / (19)	"x 20.38" (2U) 3.0 x 517.5] "x 20.38" (2U) 5.2 x 517.5] 26 / (12)  32°F (0°C) 20-90 % RH 04°F (40°C) BATTI Less than 56 dows 2000/2003/XR anagement from SI Communication	3.39" x 17.24" [86.2 x 43t] 17.24" x 3.39" [438.0 x 8t] 47 / (21)  to 104°F (40°C) (non-condensing) ERIES (REFRESH 0dBA @ 1 Meter  P/Vista/2008/7, Lin NMP manager and ons from MODBUS	' x 20.38" (2U) 3.0 x 517.5] ' x 20.38" (2U) 5.2 x 517.5] 28 / (13)  Charge @ 3 mon  ux, Unix, and MAC web browser	3.39" x 17.24 [86.2 x 43: 17.24" x 3.39 [438.0 x 8: 65 / (29)	" x 27.74" (2U) 3.0 x 704.6] " x 27.74" (2U) 5.2 x 517.5]		
Warning  ***PHYSIC Rack Moor Tower Net Weig ENVIRO Operating Humidity Storage Noise Lev MANAGE Smart RS Optional Optional	Indicators  CAL WEIGHT & DI unt  unt  tht lbs. / (kg)  NMENT (Electronic g  vel  EMENT / COMMUN 5-232/USB  SNMP Card  MODBUS Card  AS400 Card	Low battery, Overl Bypass Frequency MENSIONS H" x 3.39" x 17.24 [86.2 x 43 17.24" x 3.39 [438.0 x 8 29 / (13)	/ Unstable / W" x D" / [mm] " x 16.44" (2U) 8.0 x 417.5] " x 16.44" (2U) 6.2 x 417.5] 20 / (9)	3.39" x 17.24 [86.2 x 43i 17.24" x 3.39 [438.0 x 8i 42 / (19)	"x 20.38" (2U) 3.0 x 517.5] "x 20.38" (2U) 5.2 x 517.5] 26 / (12)  32°F (0°C) 20-90 % RH 04°F (40°C) BATTI Less than 56 dows 2000/2003/XR anagement from SI Communication	3.39" x 17.24" [86.2 x 43i 17.24" x 3.39 [438.0 x 8i 47 / (21) to 104°F (40°C) (non-condensing) ERIES (REFRESH 0dBA @ 1 Meter P/Vista/2008/7, Lin NMP manager and	' x 20.38" (2U) 3.0 x 517.5] ' x 20.38" (2U) 5.2 x 517.5] 28 / (13)  Charge @ 3 mon  ux, Unix, and MAC web browser	3.39" x 17.24 [86.2 x 43: 17.24" x 3.39 [438.0 x 8: 65 / (29)	" x 27.74" (2U) 3.0 x 704.6] " x 27.74" (2U) 6.2 x 517.5]		

<sup>\*</sup> Derate capacity to 95% when the output voltage is adjusted to 115VAC. Derate capacity to 90% when the output voltage is adjusted to 110VAC. Derate capacity to 80% when the output voltage is adjusted to 100VAC.

<sup>\*\*</sup>Always reference Spec Control Drawing (SCD) for the most current & accurate dimensions and weights

## The Staco V Series Battery Run Time Charts

Standard External Battery Run Time Chart - Minutes Used with Staco V Series, 120 VAC, Standard Models, Universal Tower/Rack 1000VA, 1500VA, 2000VA & 3000VA

UPS Rating	Model (Part Number)	Quantity Cabinets	# Strings Internal/External	25% Load	50% Load	75% Load	100% Load	*Dimensions H" x W" x D" / [mm]	*Wt. lbs. / (kg)
1000VA	Internal	0	1/0	26.9	11.7	6.6	4		
	<b>V1000EBC</b> (SCV-BAT-1K)	1	1/2	103.3	47	29.2	20.2	3.39" x 17.24" x 17.04" (2U) [86.2 x 438.0 x 432.7]	38 / (17)
1500VA	Internal	0	1/0	26.9	11.7	6.6	4		
	<b>V1500EBC</b> (SCV-BAT-1.5K)	1	1/2	103.3	47	29.2	20.2	3.39" x 17.24" x 20.97" (2U) [86.2 x 438.0 x 532.7]	55 / (25)
2000VA	Internal	0	1/0	26.9	11.7	6.6	4		
	V2000EBC (SCV-BAT-2K)	1	1/2	103.3	47	29.2	20.2	3.39" x 17.24" x 20.97" (2U) [86.2 x 438.0 x 532.7]	64 / (29)
3000VA	Internal	0	1/0	26.9	11.7	6.6	4		
	<b>V3000EBC</b> (SCV-BAT-3K)	1	1/2	103.3	47	29.2	20.2	3.39" x 17.24" x 25.70" (2U) [86.2 x 438.0 x 652.7]	91 / (41)

Note: 1. ONLY (1) Standard Battery Pack can be used on the SCV-X0002 Models without effecting recharge time. If (2) battery packs are used the recharge will take twice the time.

2. If longer run times are needed or future expansion is planned the LB Model is recommended.

3. Run times included total of internal and external battery strings.

Standard External Battery Run Time Chart - Minutes Used with Staco V, 120VAC, XL Models, Universal Rack/Tower 900VA, 1250VA, 1700VA & 2500VA

UPS Rating	Model (Part Number)	Quantity Cabinets	# Strings	25% Load	50% Load	75% Load	100% Load	*Dimensions H" x W" x D" / [mm]	*Wt. lbs./(kg)
900VA	Internal	0	0	0	0	0	0		
	V1000EBC (SCV-BAT-1K)	1	2	71.8	32.5	20	13.7	3.39" x 17.24" x 17.04" (2U) [86.2 x 438.0 x 432.7]	38 / (17)
		2	4	165.8	76	47.4	33.1		76 / (34)
1250VA	Internal	0	0	0	0	0	0		
	<b>V1500EBC</b> (SCV-BAT-1.5K)	1	2	78.8	35.7	22	15.2	3.39" x 17.24" x 20.97" (2U) [86.2 x 438.0 x 532.7]	55 / (25)
		2	4	181.8	83.4	52.1	36.4		110 / (50)
1700VA	Internal	0	0	0	0	0	0		
	V2000EBC (SCV-BAT-2K)	1	2	76.9	34.9	21.5	14.8	3.39" x 17.24" x 20.97" (2U) [86.2 x 438.0 x 532.7]	64 / (29)
		2	4	177.5	81.5	50.8	35.5		128 / (58)
2500VA	Internal	0	0	0	0	0	0		
	V3000EBC (SCV-BAT-3K)	1	2	78.8	35.7	22	15.2	3.39" x 17.24" x 25.70" (2U) [86.2 x 438.0 x 652.7]	91 / (41)
		2	4	181.8	83.4	52.1	36.4	-	182 / (82)

Note: Weights include the total of all cabinets

<sup>\*</sup>Always reference Spec Control Drawing (SCD) for the most current & accurate dimensions and weights

<sup>\*</sup>Always reference Spec Control Drawing (SCD) for the most current & accurate dimensions and weights

## The Staco V Series Battery Run Time Charts (Continued)

Extended Battery Run Time Chart - Minutes Used with Staco V, 120VAC, XL Models, Universal Rack/Tower 900VA, 1250VA, 1700VA & 2500VA

	attery Run Time Chart	Quantity						*Dimensions	*Wt.
UPS Rating	Part Number	Cabinets	# Strings	25% Load	50% Load	75% Load	100% Load	H" x W" x D" / [mm]	lbs. / (kg)
(2) HR1290W 900VA	/ Batteries per string SCV-BAT-90-1K-1	1	1	97.2	43.8	26.7	18.2		69 / (31)
000 171	SCV-BAT-90-1K-2	1	2	220.2	102.9	64.2	44.7	0.70" 40.00" 00.04"(51.1)	100 / (45)
	SCV-BAT-90-1K-3	1	3	349.5	166.4	105.1	73.9	8.72" x 19.00" x 22.94"(5U) [221.5 x 482.6 x 582.5]	130 / (59)
	SCV-BAT-90-1K-4	1	4	481.9	232.4	148.1	104.7	[22.10 x 102.0 x 002.0]	160 / (73)
	SCV-BAT-90-1K-5 SCV-BAT-90-1K-4	2	5 8	616.2 1030.1	300 507.7	192.3 329.4	136.6 236.4	17.44" x 19.00" x 22.94" (10U)	190 / (86) 320 / (146)
	SCV-BAT-90-1K-5	2	10	> 1200	648.8	423.2	305.1	[443.0 x 482.6 x 582.5]	380 / (172)
(2) HR12150	W Batteries per string			1	1	1	1	0.70   10.00   00.04  /[[]]	
900VA	SCV-BAT-150-1K-1	1	1	187.2	91.7	57.9	39.8	8.72" x 19.00" x 22.94"(5U) [221.5 x 482.6 x 582.5]	90 / (41)
	SCV-BAT-150-1K-1	2	2	398.6	197	129.1	93.2	17.44" x 19.00" x 22.94" (10U) [443.0 x 482.6 x 582.5]	180 / (82)
	SCV-BAT-150-1K-2 SCV-BAT-150-1K-3	1 1	2 3	398.6 622.3	197 306.3	129.1 200.9	93.2 146.4	8.72" x 19.00" x 22.94"(5U) [221.5 x 482.6 x 582.5]	141 / (64) 193 / (88)
	SCV-BAT-150-1K-2	2	4	852.2	419.8	274.7	200.2	17.44" x 19.00" x 22.94" (10U)	282 / (128)
	SCV-BAT-150-1K-3	2	6	> 1200	655.3	428.3	311.3	[443.0 x 482.6 x 582.5]	386 / (176)
	SCV-BAT-150-1K-3	3	9	> 1200	1018.7	668.5	485.6	26.16" x 19.00" x 22.94" (15U) [664.5 x 482.6 x 582.5]	579 / (264)
	SCV-BAT-150-1K-3	4	12	> 1200	> 1200	914.8	666.1	34.88" x 19.00" x 22.94" (20U) [886.0 x 482.6 x 582.5]	772 / (352)
	SCV-BAT-150-1K-3	5	15	> 1200	> 1200	1163.3	849.8	43.60" x 19.00" x 22.94" (25U) [1107.5 x 482.6 x 582.5]	965 / (440)
	/ Batteries per string								
1250VA	SCV-BAT-90-1.5K-1 SCV-BAT-90-1.5K-2	1 1	1 2	106.6 240.6	48.3 112.8	29.5 70.6	20.2 49.2	8.72" x 19.00" x 22.94"(5U) [221.5 x 482.6 x 582.5]	85 / (39) 130 / (59)
(3) HR12150\	W Batteries per string			240.0	112.0	70.0	TJ.2	[EETHO X TOLIO X COLIO]	1007 (00)
1250VA	SCV-BAT-150-1.5K-1	1	1	203.5	100.1	63.6	44	8.72" x 19.00" x 22.94"(5U) [221.5 x 482.6 x 582.5]	115 / (52)
								[221.5 x 482.6 x 582.5] 17.44" x 19.00" x 22.94" (10U)	. , ,
	SCV-BAT-150-1.5K-1	2	2	433.8	214.2	140.5	101.7	[443.0 x 482.6 x 582.5]	230 / (104)
	SCV-BAT-150-1.5K-1	3	3	677.1	333.2	218.4	159.2	26.16" x 19.00" x 22.94" (15U) [664.5 x 482.6 x 582.5]	345 / (156)
	SCV-BAT-150-1.5K-2	1	2	433.8	214.2	140.5	101.7	8.72" x 19.00" x 22.94"(5U) [221.5 x 482.6 x 582.5]	192 / (87)
	SCV-BAT-150-1.5K-2	2	4	926.5	456.8	298.8	217.6	17.44" x 19.00" x 22.94" (10U) [443.0 x 482.6 x 582.5]	384 / (174)
	SCV-BAT-150-1.5K-2	3	6	> 1200	712.9	466.1	338.6	26.16" x 19.00" x 22.94" (15U) [664.5 x 482.6 x 582.5]	576 / (261)
	SCV-BAT-150-1.5K-2	4	8	> 1200	974.9	639.3	464.3	34.88" x 19.00" x 22.94" (20U) [886.0 x 482.6 x 582.5]	768 / (348)
	SCV-BAT-150-1.5K-2	5	10	> 1200	> 1200	815.9	593.4	43.60" x 19.00" x 22.94" (25U) [1107.5 x 482.6 x 582.5]	960 / (435)
(4) HR1290W	/ Batteries per string								
1700VA	SCV-BAT-90-2K-1	1	1	104.1	47.1	28.8	19.7	8.72" x 19.00" x 22.94"(5U)	100 / (45)
	SCV-BAT-90-2K-1	2	2	235.2	110.2	68.9	48	17.44" x 19.00" x 22.94" (10U)	200 / (90)
	SCV-BAT-90-2K-2	1	2	235.2	110.2	68.9	48	[221.5 x 482.6 x 582.5] 17.44" x 19.00" x 22.94" (10U) [443.0 x 482.6 x 582.5] 8.72" x 19.00" x 22.94" (5U)	160 / (73)
	SCV-BAT-90-2K-2	2	4	513.4	248.2	158.4	112.1	17.44" x 19.00" x 22.94" (10U)	320 / (146)
(A) UD12150	W Batteries per string		7	313.4	240.2	150.4	112.1	[443.0 x 482.6 x 582.5]	3207 (140)
1700VA	SCV-BAT-150-2K-1	1	1	199.2	97.8	62.1	42.9	8.72" x 19.00" x 22.94"(5U) [221.5 x 482.6 x 582.5]	141 / (64)
	SCV-BAT-150-2K-1	2	2	424.5	209.6	137.5	99.5	17.44" x 19.00" x 22.94" (10U) [443.0 x 482.6 x 582.5]	282 / (128)
	SCV-BAT-150-2K-1	3	3	662.6	326	213.8	155.8	26.16" x 19.00" x 22.94" (15U) [664.5 x 482.6 x 582.5]	423 / (192)
	SCV-BAT-150-2K-1	4	4	906.8	447	292.4	213	34.88" x 19.00" x 22.94" (20U) [886.0 x 482.6 x 582.5]	564 / (256)
	SCV-BAT-150-2K-1	5	5	1153.2	571.2	373.3	271.5	43.60" x 19.00" x 22.94" (25U) [1107.5 x 482.6 x 582.5]	705 / (320)
(6) HR1251W	/ Batteries per string								
2500VA	SCV-BAT-51-3K-2	1	2	132.6	57.9	34.8	23.8	8.72" x 19.00" x 22.94"(5U) [221.5 x 482.6 x 582.5]	136 / (62)
	SCV-BAT-51-3K-2	2	4	304.4	140.6	86.1	59	17.44" x 19.00" x 22.94" (10U) [443.0 x 482.6 x 582.5]	272 / (124)
(6) HR12150	W Batteries per string		l .				I.	[	
2500VA	SCV-BAT-150-3K-1	1	1	203.5	100.1	63.6	44	8.72" x 19.00" x 22.94"(5U) [221.5 x 482.6 x 582.5]	193 / (88)
	SCV-BAT-150-3K-1	2	2	433.8	214.2	140.5	101.7	17.44" x 19.00" x 22.94" (10U) [443.0 x 482.6 x 582.5]	386 / (176)
	SCV-BAT-150-3K-1	3	3	677.1	333.2	218.4	159.2	26.16" x 19.00" x 22.94" (15U) [664.5 x 482.6 x 582.5]	579 / (264)
	SCV-BAT-150-3K-1	4	4	926.5	456.8	298.8	217.6	34.88" x 19.00" x 22.94" (20U) [886.0 x 482.6 x 582.5]	772 / (352)
	SCV-BAT-150-3K-1	5	5	1177.9	583.8	381.5	277.5	43.60" x 19.00" x 22.94" (25U) [1107.5 x 482.6 x 582.5]	965 / (440)
Note: 1	. Battery Times are based or				1		I	[1107.5 X 482.6 X 582.5]	

Note:

<sup>1.</sup> Battery Times are based on new batteries +/- 5%.
2. Extended Battery Packs are Hot Swappable, not individual batteries.
3. Weight includes total number of all cabinets.
4. Consult Factory for longer Run Times.

<sup>\*</sup>Always reference Spec Control Drawing (SCD) for the most current & accurate dimensions and weights

# **Staco Service**Field Service Program

Staco specializes in providing choice and flexibility by developing tailored solutions for preventive and remedial maintenance services, as well as emergency repairs for all of our products. Staco Service is built upon a nationwide network of highly trained and motivated customer support engineers and technicians who can provide professional services and care throughout the life of your equipment.

- Start-Ups
- Preventive Maintenance
- Spare Parts
- Battery Analysis/Refresh/Replacement
- On-Site Training
- Time & Material Services
- ServiStar: Providing security beyond our standard warranty

## Why Staco Energy Products?

## Because we are your tailored power solutions provider!

Unique application design demands, harsh environment concerns, the need to meet non-standard physical space requirements—providing the "not so usual" is what we do best. From leading edge uninterruptible power supplies, power conditioners, power factor and harmonic correction equipment, to the world's most stable voltage control systems, we have the technology you need to protect and manage your business, and the knowledge to make it work for you.



Since 1937, customers worldwide have relied on Staco Energy as their tailored solutions provider, to solve a wide range of electrical power problems. Headquartered in Dayton, Ohio, Staco Energy Products is a wholly owned subsidiary of Components Corporation of America, located in Dallas, Texas.



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