

STACO ENERGY® PRODUCTS CO.

Uninterruptible Power Supply (UPS)
Single Phase Products
1 - 10 kVA

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Contents

UNISTAR V – 1-3 KVA 2

UPS Models, with and without batteries 2
External Battery Packs, Standard and Extended Runtime Models 3

UNISTAR VP – 6-10 KVA 5

RACK MOUNT 5
Module Weights/Dimensions and Pricing for Additional Battery Packs 5
TOWER Series 6
Additional Tower Battery Packs 6

ACCESSORIES 7

UniStar V 7
Maintenance Bypass Module (Make-Before-Break) 7
Replacement Battery Trays 7
Battery Cable and Rack Mount Rail Kit 7
Strip PDU's 7
UniStar VP 8
Maintenance Bypass Cabinets and Parallel Cabinet w/ Bypass (Make-Before-Break) 8
Rack Mount PDU's 8
For use with UniStar V and UniStar VP 9
Replacement Batteries 9
Tower Cabinet – 9U & 18U 9
Communications Options 9

SERVICE OPTIONS 10

APPENDIX 11

Battery Runtimes – UniStar V 11
1000 VA, 120V 11
1000 VA, 230V 12
1500 VA, 120V 13
1500 VA, 230V 13
2000 VA, 120V 14
2000 VA, 230V 14
3000 VA, 120V 15
3000 VA, 230V 15
Battery Runtimes – UniStar VP RACK 16
6 kVA with ISO (SCV-60021, SCV-60021-240, SCV-60021-P, SCV-60021-P-240) 16
6 kVA without ISO (SCV-60022, SCV-60022-240, SCV-60022-P, SCV-60022-P-240) 16
10 kVA with ISO (SCV-11021, SCV-11021-240, SCV-11021-P, SCV-11021-P-240) 17
10 kVA without ISO (SCV-11022, SCV-11022-240, SCV-11022-P, SCV-11022-P-240) 17
Battery Runtimes – UniStar VP TOWER 18
6 kVA with ISO (SCV-60021T, SCV-60021T-240, SCV-60021T-P, SCV-60021T-P-240) 18
6 kVA without ISO (SCV-60022T, SCV-60022T-240, SCV-60022T-P, SCV-60022T-P-240) 18
10 kVA with ISO (SCV-11021T, SCV-11021T-240, SCV-11021T-P, SCV-11021T-P-240) 19
10 kVA without ISO (SCV-11022T, SCV-11022T-240, SCV-11022T-P, SCV-11022T-P-240) 19

UNISTAR V – 1-3 KVA UPS Models, with and without batteries

On-line, Double-Conversion, .9pf – LCD Panel, USB and RS-232 Standard

Standard 120 & 230 VAC Universal Rack/Tower Mount 1000 VA, 1500 VA, 2000 VA & 3000 VA UPS

Power Rating	I/O Voltage	Part Number	Runtime Internal Batteries	Input Cord	Output Connection	*Dimensions H" x W" x D" [mm]	*Wt (lbs.) [kg]
1000VA / 900W	120/120	**SCV-10001**	2.7	5-15P	(4) 5-15R	3.39" x 17.24" x 16.44" (2U) [86.2 x 438	29.1 [13]
	230/230	**SCV-10002**		(10A) IEC320-	(8) IEC60320		28.4 [13]
1500VA / 1350W	120/120	**SCV-15001**		5-15P	(4) 5-15R	3.39" x 17.24" x 20.38" (2U) [86.2 x 438 x 517.5]	41.7 [19]
	230/230	**SCV-15002**		(10A) IEC320-C14	(8) IEC60320		38.8 [18]
2000VA / 1800W	120/120	**SCV-20001**		5-20P	(8) 5-20R		47.2 [21]
	230/230	**SCV-20002**		(10A) IEC320-C14	(8) IEC60320		45.4 [21]
3000VA / 2700W	120/120	**SCV-30001**		L5-30P	(4) 5-20R & (1) L5-30R	3.39" x 17.24" x 27.74" (2U) [86.2 x 438 x 704.6]	65.3 [30]
	230/230	**SCV-30002**		(16A) IEC320-C20	(6) IEC60320	3.39" x 17.24" x 25.1" (2U) [86.2 x 438 x 637.5]	65.5 [30]

Extended Runtime (-LB) 120 & 230 VAC Universal Rack/Tower Mount 900/1000 VA, 1250/1500 VA, 1700/2000

Power Rating	I/O Voltage	Part Number	Runtime Internal Batteries	Input Cord	Output Connection	*Dimensions H" x W" x D" [mm]	*Wt (lbs.) [kg]
900VA / 810W	120/120	**SCV-10001-LB**	NONE	5-15P	(4) 5-15R	3.39" x 17.24" x 16.44" (2U) [86.2 x 438 x 417.5]	20.3 [9.2]
1000VA / 900W	230/230	**SCV-10002-LB**		(10A) IEC320-C14	(8) IEC60320		19 [8.6]
1250VA / 1125W	120/120	**SCV-15001-LB**		5-15P	(4) 5-15R	3.39" x 17.24" x 20.38" (2U) [86.2 x 438 x 517.5]	26 [12]
1500VA / 1350W	230/230	**SCV-15002-LB**		(10A) IEC320-C14	(8) IEC60320		23.6 [11]
1700VA / 1530W	120/120	**SCV-20001-LB**		5-20P	(8) 5-20R		27.6 [13]
2000VA / 1800W	230/230	**SCV-20002-LB**		(10A) IEC320-C14	(8) IEC60320		23.6 [11]
2500VA / 2250W	120/120	**SCV-30001-LB**		L5-30P	(4) 5-15R & (1) I5-30R	3.39" x 17.24" x 27.74" (2U) [86.2 x 438 x 704.6]	33.3 [15]
3000VA / 2700W	230/230	**SCV-30002-LB**		(16A) IEC320-C20	(6) IEC60320	3.39" x 17.24" x 25.1" (2U) [86.2 x 438 x 637.5]	30.2 [14]

* Dimensions and weights are without rack mounting hardware. Units fit standard 19" rack. For weights & dimensions, always reference spec control drawing.

Notes:
1) Standard Units include one (1) string of internal HRL1234W batteries – ONLY one (1) External Battery Pack is recommended without affecting recharge time. If two (2) Battery Packs are used, the recharge will take twice the time (over 30 hours to charge to 90%, once depleted). For longer runtime applications, use Extended Runtime UPS.
2) Batteries are "Hot-Swappable".
3) Unit ships with bundled NetAgent 9 Shutdown Software.
4) All units ship with floor stand and rack mount brackets.

External Battery Packs, Standard and Extended Runtime Models

Runtime information is located in Appendix.

Standard Battery Pack - Can be used with Standard or "-LB" UPS

UPS Rating (kVA)	Part Number	Battery PN	# Strings/ # Batteries	*Dimensions H" x W" x D" [mm]	*Wt. (lbs) [kg]
900-1000 VA	**SCV-BAT-1K**	HRL1234W	2/4	3.39" x 17.24" x 17.04" (2U) [86.2 x 438 x 432.7]	37.7 [17]
1250-1500 VA	**SCV-BAT-1.5K**	HRL1234W	2/6		47.4 [22]
1700-2000 VA	**SCV-BAT-2K**	HRL1234W	2/8	3.39" x 17.24" x 20.97" (2U) [86.2 x 438 x 532.7]	63.9 [29]
2500-3000 VA	**SCV-BAT-3K**	HRL1234W	2/12	3.39" x 17.24" x 25.7" (2U) [86.2 x 438 x 652.7]	90.8 [41]

Note: Maximum of five (5) Standard Battery Packs can be used on "-LB" Models.
Recommend using no more than (1) Standard Battery Pack with Standard (non "-LB") UPS to avoid excessive recharge times.

Extended Runtime Battery Pack - For use with "-LB" UPS

UPS Rating (kVA)	Part Number	Battery PN	# Strings/ # Batteries	*Dimensions H" x W" x D" [mm]	*Wt. (lbs) [kg]
900-1000 VA	**SCV-BAT-51-1K-1**	HR1251W	1/2	8.72" x 19" x 22.94" (5U) [221.5 x 482.6 x 582.5]	55 [25]
	SCV-BAT-51-1K-2		2/4		71 [32]
	SCV-BAT-51-1K-3		3/6		88 [40]
	SCV-BAT-51-1K-4		4/8		104 [47]
	SCV-BAT-51-1K-5		5/10		120 [54]
	SCV-BAT-51-1K-6		6/12		136 [62]
	SCV-BAT-51-1K-7		7/14		152 [69]
	SCV-BAT-51-1K-8		8/16		169 [77]
	SCV-BAT-90-1K-1	HR1290W	1/2		69 [31]
	SCV-BAT-90-1K-2		2/4		100 [45]
	SCV-BAT-90-1K-3		3/6		130 [59]
	SCV-BAT-90-1K-4		4/8		160 [73]
	SCV-BAT-90-1K-5		5/10		190 [86]
	SCV-BAT-150-1K-1	HRL12150W	1/2		90 [41]
	SCV-BAT-150-1K-2		2/4		141 [64]
	SCV-BAT-150-1K-3		3/6		193 [88]
1250-1500 VA	**SCV-BAT-51-1.5K-1**	HR1251W	1/3		62.5 [28]
	SCV-BAT-51-1.5K-2		2/6		87 [39]
	SCV-BAT-51-1.5K-3		3/9		111 [50]
	SCV-BAT-51-1.5K-4		4/12		135 [61]
	SCV-BAT-90-1.5K-1	HR1290W	1/3		85 [39]
	SCV-BAT-90-1.5K-2		2/6		130 [59]
	SCV-BAT-150-1.5K-1	HRL12150W	1/3		115 [52]

* Dimensions and weights are without rack mounting hardware. Units fit standard 19” rack. For weights & dimensions, always reference spec control drawing.

See Appendix for runtimes

Extended Runtime Battery Pack (cont'd)

UPS Rating (kVA)	Part Number	Battery PN	# Strings/ # Batteries	*Dimensions H" x W" x D" [mm]	*Wt. (lbs) [kg]
1700-2000 VA	**SCV-BAT-51-2K-1**	HR1251W	1/4	8.72" x 19" x 22.94" (5U) [221.5 x 482.6 x 582.5]	71 [32]
	SCV-BAT-51-2K-2		2/8		104 [47]
	SCV-BAT-51-2K-3		3/12		136 [62]
	SCV-BAT-51-2K-4		4/16		169 [77]
	SCV-BAT-90-2K-1	HR1290W	1/4		100 [45]
	SCV-BAT-90-2K-2		2/8		160 [73]
	SCV-BAT-150-2K-1	HRL12150W	1/4		141 [64]
2500-3000 VA	**SCV-BAT-51-3K-1**	HR1251W	1/6		88 [40]
	SCV-BAT-51-3K-2		2/12		136 [62]
	SCV-BAT-150-3K-1	HRL12150W	1/6		193 [88]

* Dimensions and weights are without rack mounting hardware. Units fit standard 19” rack. For weights & dimensions, always reference spec control drawing

See Appendix for runtimes.

UNISTAR VP – 6-10 KVA RACK MOUNT

Online, Double-Conversion
UL1778/CE/cUL

6 kVA Models

Model Number	Power Rating	Input Vac	Output Vac	*Dimensions H" x W" x D" [mm]	*Wt (lbs) [kg]
SCV-60021	6kVA / 5.4kW	208	208/120	15.45" x 17.24" x 26.64" (9U) [392.4 x 438 x 676.6]	323 [147]
SCV-60021-240		240	240/120		
SCV-60021-P		208	208/120		
SCV-60021-P-240		240	240/120		
SCV-60022		208	208	10.3" x 17.24" x 26.64" (6U) [261.6 x 438 x 676.6]	175 [80]
SCV-60022-240		240	240		
SCV-60022-P		208	208		
SCV-60022-P-240		240	240		

10 kVA Models

Model Number	Power Rating	Input Vac	Output Vac	*Dimensions H" x W" x D" [mm]	*Wt (lbs) [kg]
SCV-11021	10kVA / 9kW	208	208/120	15.45" x 17.24" x 30.77" (9U) [392.4 x 438 x 781.6]	380 [173]
SCV-11021-240		240	240/120		
SCV-11021-P		208	208/120		
SCV-11021-P-240		240	240/120		
SCV-11022		208	208	10.3" x 17.24" x 30.77" (6U) [261.6 x 438 x 781.6]	182 [83]
SCV-11022-240		240	240		
SCV-11022-P		208	208		
SCV-11022-P-240		240	240		

Notes:
1) 208V input is default Input Voltage setting. 200V, 220V, 230V, 240V are selectable.
2) SCV-##021 Models include (1) Electronics Module, (1) Battery Pack, (1) Transformer Module, and Freight. SCV-##022 Models include (1) Electronics Module, (1) Battery Pack, and Freight. (see tables below for weights and dimensions of individual modules).
3) "-P" Models include Parallel Card and Cable.
4) "-240" Models include Quick Start Guide with instructions for setting to 240V.
4) Unit ships with bundled NetAgent 9 Shutdown Software.

Module Weights/Dimensions and Pricing for Additional Battery Packs

Module Number	# of battery strings	Batt per string	Battery pn	Input Voltage	Output Voltage	*Dimensions H" x W" x D" [mm]	*Wt (lbs) [kg]
6 kVA Modules							
SCV-BAT-6K	1	20	HRL1234W	N/A	N/A	5.15" x 17.24" x 24.63" (3U) [130.8 x 438 x 625.6]	138 [63]
SCV-ELE-6K	N/A			208 or 240	208 or 240	5.15" x 17.24" x 26.64" (3U) [130.8 x 438 x 676.6]	37 [17]
SCV-ISO-6K				208 or 240	208/120 or 240/120	5.15" x 17.24" x 24.81" (3U) [130.8 x 438 x 630.2]	148 [67]
10 kVA Modules							
SCV-BAT-10K	1	20	HRL1234W	N/A	N/A	5.15" x 17.24" x 24.63" (3U) [130.8 x 438 x 625.6]	138 [63]
SCV-ELE-10K	N/A			208 or 240	208 or 240	5.15" x 17.24" x 30.77" (3U) [130.8 x 438 x 781.6]	44 [20]
SCV-ISO-10K				208 or 240	208/120 or 240/120	5.15" x 17.24" x 27.96" (3U) [130.8 x 438 x 710.2]	198 [90]

* Dimensions and weights are without rack mounting hardware. Units fit standard 19" rack. For weights & dimensions, always reference spec control drawing.

See Appendix for runtimes.

UNISTAR VP – 6-10 KVA TOWER Series

Online, Double-Conversion

UL1778/CE/cUL

6 kVA Tower Models

Model Number	Power Rating	Input Vac	Output Vac	*Dimensions H" x W" x D" [mm]	*Wt (lbs) [kg]
SCV-60021T	6kVA / 5.4kW	208	208/120	32.54" x 9.84" x 25.56" [826.5 x 250 x 649.3]	258 [117]
SCV-60021T-240		240	240/120		
SCV-60021T-P		208	208/120		
SCV-60021T-P-240		240	240/120		
SCV-60022T		208	208		179 [81]
SCV-60022T-240		240	240		
SCV-60022T-P		208	208		
SCV-60022T-P-240		240	240		

10 kVA Tower Models

Model Number	Power Rating	Input Vac	Output Vac	*Dimensions H" x W" x D" [mm]	*Wt (lbs) [kg]
SCV-11021T	10kVA / 9kW	208	208/120	32.54" x 9.84" x 25.56" [826.5 x 250 x 649.3]	313 [142]
SCV-11021T-240		240	240/120		
SCV-11021T-P		208	208/120		
SCV-11021T-P-240		240	240/120		
SCV-11022T		208	208		190 [86]
SCV-11022T-240		240	240		
SCV-11022T-P		208	208		
SCV-11022T-P-240		240	240		

Notes: 1) 208V input is default Input Voltage setting. 200V, 220V, 230V, 240V are selectable. The standard VP can be connected with 208V Input and provide 240V Output.
2) SCV-##0021T Model includes: Internal Electronics, Internal Battery, Internal Isolation Transformer, and Freight. SCV-##022T Model includes: Internal Electronics, Internal Battery, and Freight.
3) "P" Models include Parallel Card and Cable.
4) "-240" Models include Quick Start Guide with instructions for setting to 240V.
5) Unit ships with bundled NetAgent 9 Shutdown Software.

Pricing for Additional Tower Battery Packs

Model Number	# of battery strings	Batt per string	Battery pn	*Dimensions H" x W" x D" [mm]	*Wt (lbs) [kg]
SCV-BAT-40T	2	20	HRL1234W	32.54" x 9.84" x 22.57" [826.5 x 250 x 573.2]	285 [129]
SCV-BAT-60T	3	20			400 [181]

Notes: 1) External Battery Packs are Hot Swappable, but individual batteries are not.
2) Can be installed on 6kVA or 10kVA Tower Design units.
3) **See Appendix for runtimes.**

ACCESSORIES UniStar V

Maintenance Bypass Module (Make-Before-Break)

Part Number	UPS Power Rating (kVA)	Description	*Dimensions H" x W" x D" [mm]	*Wt. (lbs.) [kg]
USC-MBPDU-11	1, 1.5	MBS for 120V UPS, 6' line cord with NEMA 5-15P and (8) NEMA 5-15R output receptacles.	3.5" x 17.3" x 3" (2U) [88.9 x 439.4 x 76.2]	8 [4]
USC-MBPDU-21	2	MBS for 120V UPS, 6' line cord with NEMA 5-20P and (6) NEMA 5-15R & (2)NEMA 5-20R output receptacles.		
USC-MBPDU-31	3	MBS for 120V UPS, 6' line cord with NEMA L5-30P and (4) NEMA 5-15R & (1) NEMA L5-30R output receptacles.		
USC-MBPDU-12	1, 1.5, 2	MBS for 230V UPS, 6' line cord with IEC C14 and (8) IEC C13 output receptacles.		
USC-MBPDU-32	3	MBS for 230V UPS, 6' line cord with IEC C20 and (6) IEC C13 & (1) IEC C19 output receptacles.		

Replacement Battery Trays

Part Number	UPS Power Rating (kVA)	Description
SCV-BATPK-1	1	Packaged Replacement Batteries in plastic tray. Includes (2) HRL1234W34W/9Ah batteries, packaged for easy replacement.
SCV-BATPK-1.5	1.5	Packaged Replacement Batteries in plastic tray. Includes (3) HRL1234W34W/9Ah batteries, packaged for easy replacement.
SCV-BATPK-2	2	Packaged Replacement Batteries in plastic tray. Includes (4) HRL1234W34W/9Ah batteries, packaged for easy replacement.
SCV-BATPK-3	3	Packaged Replacement Batteries in plastic tray. Includes (6) HRL1234W34W/9Ah batteries, packaged for easy replacement.

Note: replacement batteries in trays only fit into the UPS. Not for use in Battery Packs.

Battery Cable and Rack Mount Rail Kit

Part Number	Description	Wt. (lbs.) [kg]
SC-RAIL	UPS and/or Battery Pack Rail Kit	2 [0.9]
817-0391	6-foot long extended battery cable. Required for (2) cabinets installed side by side.	1 [0.40]

Strip PDU's

Part Number	Voltage In/Out	Input Type	Output Type	Dimensions H" x W" x D" [mm]	Wt. (lbs) [kg]
SCV-ST1	120/120	NEMA 5-15P	(24) NEMA 5-15R Receptacles on front	1.6" x 62" x 1.5" [40.6 x 1574.8 x 38.1]	9 [4]
SCV-ST2	120/120	NEMA 5-20P	(24) NEMA 5-15/20R Receptacles on front		
SCV-ST3	120/120	NEMA L5-20P	(24) NEMA 5-15/20R Receptacles on front		
SCV-ST4	120/120	NEMA 5-20P	(2) NEMA 5-15/20R Receptacles on the front of strip and (8) NEMA 5-15/20R Receptacles on the back	1.74" x 17" x 3.5" [44.2 x 431.8 x 88.9]	7 [3]

Maintenance Bypass Cabinets and Parallel Cabinet w/ Bypass (Make-Before-Break)

Part Number	Description	*Dimensions H" x W" x D" [mm]	*Wt. (lbs.) [kg]
SCV-MBS-10K-R	External, Rack Mount, Make-Before-Break Maintenance Bypass for 208 or 240V Input and 208, 240, 208/120, or 240/120V Output voltage configurations. Provides complete bypass around UPS Electronics Module.	3.4" x 17.25" x 6.22" (2U) [86.4 x 438.2 x 158]	7 [3]
SCV-MBS-10K-W	External, Wall Mount, Make-Before-Break Maintenance Bypass for 208 or 240V Input and 208 or 240V Output voltage configurations. Provides complete bypass around UPS Electronics Module.	17.4" x 11.8" x 4.9" [442 x 299.7 x 124.5]	7 [3]
SCV-PKITWMBS	VP Series UPS Parallel Cabinet; Max capacity 3 units at 30 kVA total, single phase 240 – 200 VAC. The Parallel Cabinet provides input and output landing space for the power conductors, maximum of 3 each at 6 kVA or 10 kVA single phase UPS. The Parallel cabinet also contains a Maintenance Bypass Switch allowing full bypass and isolation of all non-isolated UPS. (May "NOT" be used as a Make Before Break MBS with galvanic isolated UPS.) To be used with -P UPS. Parallel Card not included. Can be used with 208 VAC input/output or 240 VAC input/output systems only.	22.19" x 24" x 13.16" [563.6 x 609.6 x 334.3]	75 [34]

Note: The Rack Mount bypass (-R) may be used to bypass the UPS prior to feeding the isolation pack on Rack UPS models. Neither bypass can be used with Tower units with Isolation Transformer.

Rack Mount PDU's

Part Number	Input Voltage	Input Type	Output Type	*Dimensions H" x W" x D" [mm]	Wt. (lbs) [kg]
SCV-PDU1	120	2' Hardwired input cord	(7) NEMA 5-15/20R, 20A output receptacles	8.72" x 17.38" x 8.42" (5U) [221.5 x 441.3 x 213.9]	20 [9]
SCV-PDU2	120	2' Hardwired input cord	(4) NEMA 5-15/20R, 20A & (2) L5-30R, 30A output receptacles		
SCV-PDU3	120, 208, or 240	2' Hardwired input cord	(4) NEMA 5-15/20R, 20A & (2) L6-30R, 30A output receptacles		
SCV-PDU4	120, 208, or 240	2' Hardwired input cord	(4) NEMA 5-15/20R, 20A, (1) L6-20R, 20A, & (2) L6-30R, 30A output receptacles		
SCV-PDU5	120, 208, or 240	2' Hardwired input cord	(4) NEMA 5-15/20R, 20A, (2) L6-20R, 20A, & (1) L6-30R, 30A output receptacles		
SCV-PDU6	208 or 240	2' Hardwired input cord	(3) NEMA L6-30R, 30A output receptacles		

Notes:
1) PDU's 3, 4, 5, and 6 can be wired for 208V or 240V input.
2) PDU'S 3, 4, 5, and 6 have (2) input cords: (1) for 120V and (1) for 208V-240V.
3) PDU 6 has (1) input cord for 208V-240V.
4) All units ship with Rack Mount hardware.
5) SCV-PDU6 is used with SCV-##0022 Models.

* Dimensions and weights are without rack mounting hardware. Units fit standard 19" rack. For weights & dimensions, always reference spec control drawing.

ACCESSORIES For use with UniStar V and UniStar VP

Replacement Batteries

Part Number	UPS Power Rating (kVA)	Description	Wt. (lbs.) [kg]
170-0196	All	Replacement battery: 12 Volt 34W/9Ah	6 [3]

Tower Cabinet – 9U & 18U

Model Number	Description	Dimensions H" x W" x D" [mm]	Wt. (lbs.) [kg]
860-0542	Single Cabinet with Top and Side Panels, Front Door with magnetic latches, Rear Door with lockable latch. Features standard casters for mobility. Powder Coated, flat black.	25.19" x 23.86" x 32.34" (9U) [639.8 x 606 x 821.4]	310 [141]
860-0543	Single Cabinet with Top and Side Panels, Front Door with magnetic latches, Rear Door with lockable latch. Features seismic base for stability. Powder Coated, flat black.	27.89" x 23.86" x 32.34" (9U) [708.4 x 606 x 821.4]	325 [147]
860-0544	Stacked Double Cabinet with Top and Side Panels, Front Doors with magnetic latches, Rear Doors with lockable latch (2 cabinets). Powder Coated, flat black. Features standard casters for mobility.	48.96" x 23.86" x 32.34" (18U) [1243.6 x 606 x 821.4]	375 [170]
860-0545	Stacked Double Cabinet with Top and Side Panels, Front Doors with magnetic latches, Rear Doors with lockable latch (2 cabinets). Features seismic base for stability. Powder Coated, flat black. Features standard casters for mobility.	51.57" x 23.86" x 32.34" (18U) [1309.9 x 606 x 821.4]	380 [172]
860-0546	Single Cabinet with Top and Side Panels, Front and Back are open. Features standard casters for mobility. Powder Coated, flat black.	25.19" x 23.86" x 32.34" (9U) [639.8 x 606 x 821.4]	170 [77]
860-0547	Single Cabinet with Top and Side Panels, Front and Back are open. Features seismic base for stability. Powder Coated, flat black.	27.89" x 23.86" x 32.34" (9U) [708.4 x 606 x 821.4]	180 [82]
860-0548	Stacked Double Cabinet with Top and Side Panels, Front and Back are open (2 cabinets). Features standard casters for mobility. Powder Coated, flat black.	48.96" x 23.86" x 32.34" (18U) [1243.6 x 606 x 821.4]	295 [134]
860-0549	Stacked Double Cabinet with Top and Side Panels, Front and Back are open (2 cabinets). Features seismic brackets for stability. Powder Coated, flat black.	51.57" x 23.86" x 32.34" (18U) [1309.9 x 606 x 821.4]	305 [138]

Notes:
1) Each cabinet accommodates a maximum of any combination of (4) UPS & Standard Battery Packs or (1) UPS & (1) Extended Battery Pack.
2) Stacked cabinets are (2) single cabinets bolted together for 18U.

Communications Options

Part Number	Description
SCV-AS400-DB9	AS400 Card with DB9 Connector: provides contact closures for remote monitoring of your UPS. To meet different application requirements, the AS400 card is capable of selecting the status of the dry-contact signal (active close or active open) by setting jumper. The suitable applications are listed below: - IBM Server, Personal PC & Workstation equipment - Auto-controlled industrial equipment & communication applications
SCV-AS400-HW	AS400 Card with 9 Pin Connector: provides contact closures for remote monitoring of your UPS. To meet different application requirements, the AS400 card is capable of selecting the status of the dry-contact signal (active close or active open) by setting jumper. The suitable applications are listed below: - IBM Server, Personal PC & Workstation equipment - Auto-controlled industrial equipment & communication applications
SCV-EMDKIT	Environmental module for SNMP network. Includes SNMP card, multi-port and EMD module.
SCV-MODBUS	MODBUS Card: provides UPS and PV inverter systems with the functionality of communication with PCs through MODBUS protocol: - Implements MODBUS RTU protocol - Provides MODBUS functions including Read Holding Registers and Write Registers - Provides RS485 Interface
SCV-MODBUS-EXT	External MODBUS Communicatoins module. Connects to the RS-232 data port and converts standards UPS protocol to MODBUS RTU485 (2) two wire communications.
SCV-SNMP	Internal SNMP Card, MIB Software, Interface Cable and Operation Manual. Supports HP Open View, Sun SunNet Manager, IBM NetView, Novel NMS, Action AccView and other SNMP Compliant NMS's.

UNISTAR V AND VP SERVICE OPTIONS

Part Number	Description
SERV-UNI-SU-58-01	On-site 5 x 8 Start-up to be conducted after installation by owner or contractor. This includes installation inspection, check-out and activation of UPS and instruction of operational personnel. Start-up to be performed Monday - Friday during normal working hours of 8 AM to 5 PM. Includes travel, living, labor and parts' expense. Please provide 2 weeks advanced notice to schedule Start-up.
SERV-UNI-SU-724-01	On-site 7 x 24 Start-up to be conducted after installation by owner or contractor. This includes installation inspection, check-out and activation of UPS and instruction of operational personnel. Start-up can be performed on any day at any time. Includes travel, living, labor, and parts' expense. Please provide 2 weeks advanced notice to schedule Start-up.
SERV-UNI-PM-01	Preventative Maintenance Service visit conducted during normal business hours, 8am - 5pm M-F.
SERV-UNI-REM-01	1-Year Extended Warranty agreement consistent with original product warranty. Depot Repair/Replace, Parts' expense included.

Notes: 1) Factory Start Up not required to validate warranty.
2) Standard 3 Year Warranty is Depot Repair/Replace, no on-site service, Freight to and from factory paid by customer.

APPENDIX

Step 1: Go to appropriate table based on kVA requirement
Step 2: Locate desired runtime in table
(Note: highlighted = optimal/most economic options)
Step 3: See columns 2, 4, and 5 for UPS, Qty of Battery Cabinets required, & Battery Cabinet

Battery Runtimes – UniStar V

1000 VA, 120V

Voltage	Used with UPS Model	Load kVA	Battery Pack Qty	Battery Pack Model Number	Battery Part #	Battery/ String	Total # Strings	25% Load	50% Load	75% Load	100% Load	
120	**SCV-10001**	1	**0**	**Internal**	HRL1234W	2	1	24.4	10.1	5.3	**2.9**	*
120	**SCV-10001-LB**	0.9	**1**	**SCV-BAT-1K**	HRL1234W	2	2	65	29.6	18	**12.0**	*
120	**SCV-10001**	1	**1**	**SCV-BAT-1K**	HRL1234W	2	3	92.7	42.9	26.5	**18.2**	*
120	**SCV-10001-LB**	0.9	**2**	**SCV-BAT-1K**	HRL1234W	2	4	147.1	68.7	43.2	**30.2**	*
120	**SCV-10001-LB**	0.9	**1**	**SCV-BAT-150-1K-1**	HRL12150W	2	1	187.2	91.7	57.9	**39.8**	*
120	**SCV-10001-LB**	0.9	**1**	**SCV-BAT-90-1K-2**	HR1290W	2	2	220.2	102.9	64.2	**44.7**	*
120	**SCV-10001-LB**	0.9	**1**	**SCV-BAT-90-1K-3**	HR1290W	2	3	349.5	166.4	105.1	**73.9**	*
120	**SCV-10001-LB**	0.9	**1**	**SCV-BAT-150-1K-2**	HRL12150W	2	2	398.6	197	129.1	**93.2**	*
120	**SCV-10001-LB**	0.9	**1**	**SCV-BAT-90-1K-4**	HR1290W	2	4	481.9	232.4	148.1	**104.7**	*
120	**SCV-10001-LB**	0.9	**1**	**SCV-BAT-150-1K-3**	HRL12150W	2	3	622.3	306.3	200.9	**146.4**	*
120	**SCV-10001-LB**	0.9	**2**	**SCV-BAT-90-1K-3**	HR1290W	2	6	752	368.5	237.4	**169.3**	*
120	**SCV-10001-LB**	0.9	**2**	**SCV-BAT-150-1K-2**	HRL12150W	2	4	852.2	419.8	274.7	**200.2**	*
120	**SCV-10001-LB**	0.9	**2**	**SCV-BAT-90-1K-4**	HR1290W	2	8	1030.1	507.7	329.4	**236.4**	*
120	**SCV-10001-LB**	0.9	**2**	**SCV-BAT-150-1K-3**	HRL12150W	2	6	>1200	655.3	428.3	**311.3**	*
120	**SCV-10001-LB**	0.9	**3**	**SCV-BAT-90-1K-4**	HR1290W	2	12	>1200	791.6	518	**374.7**	*
120	**SCV-10001-LB**	0.9	**3**	**SCV-BAT-150-1K-3**	HRL12150W	2	9	>1200	1018.7	668.5	**485.6**	*
120	**SCV-10001-LB**	0.9	**4**	**SCV-BAT-90-1K-4**	HR1290W	2	16	>1200	1085.2	710.1	**516.1**	*
120	**SCV-10001-LB**	0.9	**4**	**SCV-BAT-150-1K-3**	HRL12150W	2	12	>1200	>1200	914.8	**666.1**	*
120	**SCV-10001-LB**	0.9	**5**	**SCV-BAT-150-1K-3**	HRL12150W	2	15	>1200	>1200	1163.3	**849.8**	*

* highlighted = optimal/most economical options

Battery Runtimes – UniStar V

1000 VA, 230V

Voltage	Used with UPS Model	Load kVA	Battery Pack Qty	Battery Pack Model Number	Battery Part #	Battery/ String	Total # Strings	25% Load	50% Load	75% Load	100% Load	
230	**SCV-10002**	1	**0**	**Internal**	HRL1234W	2	1	24.4	10.1	5.3	**2.9**	*
230	**SCV-10002-LB**	1	**1**	**SCV-BAT-1K**	HRL1234W	2	2	57.3	25.9	15.6	**10.3**	*
230	**SCV-10002**	1	**1**	**SCV-BAT-1K**	HRL1234W	2	3	92.7	42.9	26.5	**18.2**	*
230	**SCV-10002-LB**	1	**2**	**SCV-BAT-1K**	HRL1234W	2	4	130	60.6	38	**26.4**	*
230	**SCV-10002-LB**	1	**1**	**SCV-BAT-150-1K-1**	HRL12150W	2	1	166.9	81.2	50.7	**34.5**	*
230	**SCV-10002-LB**	1	**1**	**SCV-BAT-90-1K-2**	HR1290W	2	2	194.9	90.6	56.3	**39.1**	*
230	**SCV-10002-LB**	1	**1**	**SCV-BAT-90-1K-3**	HR1290W	2	3	310.3	147	92.6	**64.9**	*
230	**SCV-10002-LB**	1	**1**	**SCV-BAT-150-1K-2**	HRL12150W	2	2	355.1	175.7	114.9	**82.6**	*
230	**SCV-10002-LB**	1	**1**	**SCV-BAT-90-1K-4**	HR1290W	2	4	428.7	205.8	130.7	**92.2**	*
230	**SCV-10002-LB**	1	**1**	**SCV-BAT-150-1K-3**	HRL12150W	2	3	554.4	273	179.2	**130.4**	*
230	**SCV-10002-LB**	1	**2**	**SCV-BAT-90-1K-3**	HR1290W	2	6	670.3	327.3	210.2	**149.6**	*
230	**SCV-10002-LB**	1	**2**	**SCV-BAT-150-1K-2**	HRL12150W	2	4	759.8	373.9	244.9	**178.5**	*
230	**SCV-10002-LB**	1	**2**	**SCV-BAT-90-1K-4**	HR1290W	2	8	917.5	451.8	292.4	**209.4**	*
230	**SCV-10002-LB**	1	**2**	**SCV-BAT-150-1K-3**	HRL12150W	2	6	1177.9	583.8	381.5	**277.5**	*
230	**SCV-10002-LB**	1	**3**	**SCV-BAT-90-1K-4**	HR1290W	2	12	>1200	705.7	461	**332.8**	*
230	**SCV-10002-LB**	1	**3**	**SCV-BAT-150-1K-3**	HRL12150W	2	9	>1200	909.1	595.6	**432.5**	*
230	**SCV-10002-LB**	1	**4**	**SCV-BAT-90-1K-4**	HR1290W	2	16	>1200	966.1	632.9	**459.3**	*
230	**SCV-10002-LB**	1	**4**	**SCV-BAT-150-1K-3**	HRL12150W	2	12	>1200	>1200	815.9	**593.4**	*
230	**SCV-10002-LB**	1	**5**	**SCV-BAT-150-1K-3**	HRL12150W	2	15	>1200	>1200	1038.9	**757.6**	*

* highlighted = optimal/most economical options

Battery Runtimes – UniStar V

1500 VA, 120V

Voltage	Used with UPS Model	Load kVA	Battery Pack Qty	Battery Pack Model Number	Battery Part #	Battery/ String	Total # Strings	25% Load	50% Load	75% Load	100% Load	
120	**SCV-15001**	1.5	**0**	**Internal**	HRL1234W	3	1	24.4	10.1	5.3	**2.9**	*
120	**SCV-15001-LB**	1.25	**1**	**SCV-BAT-1.5K**	HRL1234W	3	2	71.2	32.6	19.9	**13.4**	*
120	**SCV-15001**	1.5	**1**	**SCV-BAT-1.5K**	HRL1234W	3	3	92.7	42.9	26.5	**18.2**	*
120	**SCV-15001-LB**	1.25	**1**	**SCV-BAT-90-1.5K-1**	HR1290W	3	1	106.6	48.3	29.5	**20.2**	*
120	**SCV-15001-LB**	1.25	**2**	**SCV-BAT-1.5K**	HRL1234W	3	4	161	75.3	47.4	**33.2**	*
120	**SCV-15001-LB**	1.25	**1**	**SCV-BAT-90-1.5K-2**	HR1290W	3	2	240.6	112.8	70.6	**49.2**	*
120	**SCV-15001-LB**	1.25	**3**	**SCV-BAT-1.5K**	HRL1234W	3	6	258.9	121.4	76.9	**54.4**	*
120	**SCV-15001-LB**	1.25	**1**	**SCV-BAT-51-1.5K-4**	HR1251W	3	4	304.4	140.6	86.1	**59.0**	*
120	**SCV-15001-LB**	1.25	**4**	**SCV-BAT-1.5K**	HRL1234W	3	8	362.5	170.1	108	**76.6**	*
120	**SCV-15001-LB**	1.25	**2**	**SCV-BAT-90-1.5K-2**	HR1290W	3	4	524.7	253.9	162.1	**114.8**	*
120	**SCV-15001-LB**	1.25	**2**	**SCV-BAT-51-1.5K-4**	HR1251W	3	8	635.1	321.1	204.4	**143.2**	
120	**SCV-15001-LB**	1.25	**3**	**SCV-BAT-90-1.5K-2**	HR1290W	3	6	817.8	401.7	259.3	**185.3**	*
120	**SCV-15001-LB**	1.25	**3**	**SCV-BAT-51-1.5K-4**	HR1251W	3	12	950	498.3	327.7	**234.2**	
120	**SCV-15001-LB**	1.25	**4**	**SCV-BAT-90-1.5K-2**	HR1290W	3	8	1122	552.6	359.3	**258.3**	*
120	**SCV-15001-LB**	1.25	**4**	**SCV-BAT-51-1.5K-4**	HR1251W	3	16	>1200	665.1	448.9	**326.5**	
120	**SCV-15001-LB**	1.25	**5**	**SCV-BAT-90-1.5K-2**	HR1290W	3	10	>1200	705.7	461	**332.8**	*
120	**SCV-15001-LB**	1.25	**5**	**SCV-BAT-51-1.5K-4**	HR1251W	3	20	>1200	826.7	565.3	**417.5**	*

1500 VA, 230V

Voltage	Used with UPS Model	Load kVA	Battery Pack Qty	Battery Pack Model Number	Battery Part #	Battery/ String	Total # Strings	25% Load	50% Load	75% Load	100% Load	
230	**SCV-15002**	1.5	**0**	**Internal**	HRL1234W	3	1	24.4	10.1	5.3	**2.9**	*
230	**SCV-15002-LB**	1.5	**1**	**SCV-BAT-1.5K**	HRL1234W	3	2	57.3	25.9	15.6	**10.3**	*
230	**SCV-15002**	1.5	**1**	**SCV-BAT-1.5K**	HRL1234W	3	3	92.7	42.9	26.5	**18.2**	*
230	**SCV-15002-LB**	1.5	**2**	**SCV-BAT-1.5K**	HRL1234W	3	4	130	60.6	38	**26.4**	*
230	**SCV-15002-LB**	1.5	**1**	**SCV-BAT-90-1.5K-2**	HR1290W	3	2	194.9	90.6	56.3	**39.1**	*
230	**SCV-15002-LB**	1.5	**3**	**SCV-BAT-1.5K**	HRL1234W	3	6	209.1	98	61.9	**43.7**	*
230	**SCV-15002-LB**	1.5	**1**	**SCV-BAT-51-1.5K-4**	HR1251W	3	4	246.5	111.9	68	**46.5**	*
230	**SCV-15002-LB**	1.5	**4**	**SCV-BAT-1.5K**	HRL1234W	3	8	292.9	137.4	87.1	**61.7**	*
230	**SCV-15002-LB**	1.5	**2**	**SCV-BAT-90-1.5K-2**	HR1290W	3	4	428.7	205.8	130.7	**92.2**	*
230	**SCV-15002-LB**	1.5	**2**	**SCV-BAT-51-1.5K-4**	HR1251W	3	8	529.1	260.5	163.8	**114.0**	
230	**SCV-15002-LB**	1.5	**3**	**SCV-BAT-90-1.5K-2**	HR1290W	3	6	670.3	327.3	210.2	**149.6**	*
230	**SCV-15002-LB**	1.5	**3**	**SCV-BAT-51-1.5K-4**	HR1251W	3	12	789.3	410.8	266	**188.3**	
230	**SCV-15002-LB**	1.5	**4**	**SCV-BAT-90-1.5K-2**	HR1290W	3	8	917.5	451.8	292.4	**209.4**	*
230	**SCV-15002-LB**	1.5	**4**	**SCV-BAT-51-1.5K-4**	HR1251W	3	16	1072.5	555	368.5	**265.0**	
230	**SCV-15002-LB**	1.5	**5**	**SCV-BAT-90-1.5K-2**	HR1290W	3	10	1174.6	578	376.1	**270.6**	*
230	**SCV-15002-LB**	1.5	**5**	**SCV-BAT-51-1.5K-4**	HR1251W	3	20	>1200	692.1	468.6	**341.8**	*

* highlighted = optimal/most economical options

Battery Runtimes – UniStar V

2000 VA, 120V

Voltage	Used with UPS Model	Load kVA	Battery Pack Qty	Battery Pack Model Number	Battery Part #	Battery/ String	Total # Strings	25% Load	50% Load	75% Load	100% Load	
120	**SCV-20001**	2	**0**	**Internal**	HRL1234W	4	1	24.4	10.1	5.3	**2.9**	*
120	**SCV-20001-LB**	1.7	**1**	**SCV-BAT-2K**	HRL1234W	4	2	69.5	31.8	19.4	**13.0**	*
120	**SCV-20001**	2	**1**	**SCV-BAT-2K**	HRL1234W	4	3	92.7	42.9	26.5	**18.2**	*
120	**SCV-20001-LB**	1.7	**1**	**SCV-BAT-90-2K-1**	HR1290W	4	1	104.1	47.1	28.8	**19.7**	*
120	**SCV-20001-LB**	1.7	**2**	**SCV-BAT-2K**	HRL1234W	4	4	157.3	73.5	46.3	**32.4**	*
120	**SCV-20001-LB**	1.7	**1**	**SCV-BAT-90-2K-2**	HR1290W	4	2	235.2	110.2	68.9	**48.0**	*
120	**SCV-20001-LB**	1.7	**3**	**SCV-BAT-2K**	HRL1234W	4	6	253	118.6	75.1	**53.1**	*
120	**SCV-20001-LB**	1.7	**1**	**SCV-BAT-51-2K-4**	HR1251W	4	4	297.6	137.2	84	**57.5**	*
120	**SCV-20001-LB**	1.7	**4**	**SCV-BAT-2K**	HRL1234W	4	8	354.2	166.2	105.5	**74.8**	*
120	**SCV-20001-LB**	1.7	**2**	**SCV-BAT-90-2K-2**	HR1290W	4	4	513.4	248.2	158.4	**112.1**	*
120	**SCV-20001-LB**	1.7	**2**	**SCV-BAT-51-2K-4**	HR1251W	4	8	622.8	313.9	199.6	**139.8**	
120	**SCV-20001-LB**	1.7	**3**	**SCV-BAT-90-2K-2**	HR1290W	4	6	800.3	392.9	253.5	**181.0**	*
120	**SCV-20001-LB**	1.7	**3**	**SCV-BAT-51-2K-4**	HR1251W	4	12	930	488.1	320.5	**228.8**	
120	**SCV-20001-LB**	1.7	**4**	**SCV-BAT-90-2K-2**	HR1290W	4	8	1097.5	540.7	351.4	**252.5**	*
120	**SCV-20001-LB**	1.7	**4**	**SCV-BAT-51-2K-4**	HR1251W	4	16	>1200	652.3	439.5	**319.3**	
120	**SCV-20001-LB**	1.7	**5**	**SCV-BAT-90-2K-2**	HR1290W	4	10	>1200	690.6	451	**325.5**	*
120	**SCV-20001-LB**	1.7	**5**	**SCV-BAT-51-2K-4**	HR1251W	4	20	>1200	810.7	554.1	**408.6**	*

2000 VA, 230V

Voltage	Used with UPS Model	Load kVA	Battery Pack Qty	Battery Pack Model Number	Battery Part #	Battery/ String	Total # Strings	25% Load	50% Load	75% Load	100% Load	
230	**SCV-20002**	2	**0**	**Internal**	HRL1234W	4	1	24.4	10.1	5.3	**2.9**	*
230	**SCV-20002-LB**	2	**1**	**SCV-BAT-2K**	HRL1234W	4	2	57.3	25.9	15.6	**10.3**	*
230	**SCV-20002**	2	**1**	**SCV-BAT-2K**	HRL1234W	4	3	92.7	42.9	26.5	**18.2**	*
230	**SCV-20002-LB**	2	**2**	**SCV-BAT-2K**	HRL1234W	4	4	130	60.6	38	**26.4**	*
230	**SCV-20002-LB**	2	**1**	**SCV-BAT-90-2K-2**	HR1290W	4	2	194.9	90.6	56.3	**39.1**	*
230	**SCV-20002-LB**	2	**3**	**SCV-BAT-2K**	HRL1234W	4	6	209.1	98	61.9	**43.7**	*
230	**SCV-20002-LB**	2	**1**	**SCV-BAT-51-2K-4**	HR1251W	4	4	246.5	111.9	68	**46.5**	*
230	**SCV-20002-LB**	2	**4**	**SCV-BAT-2K**	HRL1234W	4	8	292.9	137.4	87.1	**61.7**	*
230	**SCV-20002-LB**	2	**2**	**SCV-BAT-90-2K-2**	HR1290W	4	4	428.7	205.8	130.7	**92.2**	*
230	**SCV-20002-LB**	2	**2**	**SCV-BAT-51-2K-4**	HR1251W	4	8	529.1	260.5	163.8	**114.0**	
230	**SCV-20002-LB**	2	**3**	**SCV-BAT-90-2K-2**	HR1290W	4	6	670.3	327.3	210.2	**149.6**	*
230	**SCV-20002-LB**	2	**3**	**SCV-BAT-51-2K-4**	HR1251W	4	12	789.3	410.8	266	**188.3**	
230	**SCV-20002-LB**	2	**4**	**SCV-BAT-90-2K-2**	HR1290W	4	8	917.5	451.8	292.4	**209.4**	*
230	**SCV-20002-LB**	2	**4**	**SCV-BAT-51-2K-4**	HR1251W	4	16	1072.5	555	368.5	**265.0**	
230	**SCV-20002-LB**	2	**5**	**SCV-BAT-90-2K-2**	HR1290W	4	10	1174.6	578	376.1	**270.6**	*
230	**SCV-20002-LB**	2	**5**	**SCV-BAT-51-2K-4**	HR1251W	4	20	>1200	692.1	468.6	**341.8**	*

* highlighted = optimal/most economical options

Battery Runtimes – UniStar V

3000 VA, 120V

Voltage	Used with UPS Model	Load kVA	Battery Pack Qty	Battery Pack Model Number	Battery Part #	Battery/ String	Total # Strings	25% Load	50% Load	75% Load	100% Load	
120	**SCV-30001**	3	**0**	**Internal**	HRL1234W	6	1	24.4	10.1	5.3	**2.9**	*
120	**SCV-30001-LB**	2.5	**1**	**SCV-BAT-3K**	HRL1234W	6	2	71.2	32.6	19.9	**13.4**	*
120	**SCV-30001**	3	**1**	**SCV-BAT-3K**	HRL1234W	6	3	92.7	42.9	26.5	**18.2**	*
120	**SCV-30001-LB**	2.5	**2**	**SCV-BAT-3K**	HRL1234W	6	4	161	75.3	47.4	**33.2**	*
120	**SCV-30001-LB**	2.5	**1**	**SCV-BAT-150-3K-1**	HRL12150W	6	1	203.5	100.1	63.6	**44.0**	*
120	**SCV-30001-LB**	2.5	**3**	**SCV-BAT-3K**	HRL1234W	6	6	258.9	121.4	76.9	**54.4**	*
120	**SCV-30001-LB**	2.5	**4**	**SCV-BAT-3K**	HRL1234W	6	8	362.5	170.1	108	**76.6**	*
120	**SCV-30001-LB**	2.5	**2**	**SCV-BAT-150-3K-1**	HRL12150W	6	2	433.8	214.2	140.5	**101.7**	*
120	**SCV-30001-LB**	2.5	**3**	**SCV-BAT-150-3K-1**	HRL12150W	6	3	677.1	333.2	218.4	**159.2**	*
120	**SCV-30001-LB**	2.5	**4**	**SCV-BAT-150-3K-1**	HRL12150W	6	4	926.5	456.8	298.8	**217.6**	*
120	**SCV-30001-LB**	2.5	**5**	**SCV-BAT-150-3K-1**	HRL12150W	6	5	1177.9	583.8	381.5	**277.5**	*

3000 VA, 230V

Voltage	Used with UPS Model	Load kVA	Battery Pack Qty	Battery Pack Model Number	Battery Part #	Battery/ String	Total # Strings	25% Load	50% Load	75% Load	100% Load	
230	**SCV-30002**	3	**0**	**Internal**	HRL1234W	6	1	24.4	10.1	5.3	**2.9**	*
230	**SCV-30002-LB**	3	**1**	**SCV-BAT-3K**	HRL1234W	6	2	57.3	25.9	15.6	**10.3**	*
230	**SCV-30002**	3	**1**	**SCV-BAT-3K**	HRL1234W	6	3	92.7	42.9	26.5	**18.2**	*
230	**SCV-30002-LB**	3	**2**	**SCV-BAT-3K**	HRL1234W	6	4	130	60.6	38	**26.4**	*
230	**SCV-30002-LB**	3	**1**	**SCV-BAT-150-3K-1**	HRL12150W	6	1	166.9	81.2	50.7	**34.5**	*
230	**SCV-30002-LB**	3	**3**	**SCV-BAT-3K**	HRL1234W	6	6	209.1	98	61.9	**43.7**	*
230	**SCV-30002-LB**	3	**4**	**SCV-BAT-3K**	HRL1234W	6	8	292.9	137.4	87.1	**61.7**	*
230	**SCV-30002-LB**	3	**2**	**SCV-BAT-150-3K-1**	HRL12150W	6	2	355.1	175.7	114.9	**82.6**	*
230	**SCV-30002-LB**	3	**3**	**SCV-BAT-150-3K-1**	HRL12150W	6	3	554.4	273	179.2	**130.4**	*
230	**SCV-30002-LB**	3	**4**	**SCV-BAT-150-3K-1**	HRL12150W	6	4	759.8	373.9	244.9	**178.5**	*
230	**SCV-30002-LB**	3	**5**	**SCV-BAT-150-3K-1**	HRL12150W	6	5	968.3	477.8	312.4	**227.5**	*

* highlighted = optimal/most economical options

Battery Runtimes – UniStar VP RACK

Step 1: Go to appropriate table based on kVA requirement
Step 2: Locate desired runtime in table
Step 3: See columns 1-3 for UPS, Qty of Battery Cabinets required, & Battery Cabinet

6 kVA with ISO (SCV-60021, SCV-60021-240, SCV-60021-P, SCV-60021-P-240)

UPS Model	Add'l Battery Pack Qty	Battery Pack Model Number	Total # Strings	Battery/ String	Battery Part #	25% Load	50% Load	75% Load	100% Load
SCV-60021	**0**	**included w/ UPS**	1	20	HRL1234W	34.9	15.5	11	**7.2**
SCV-60021	**1**	**SCV-BAT-6K**	2	20	HRL1234W	80.4	37.8	28	**19.6**
SCV-60021	**2**	**SCV-BAT-6K**	3	20	HRL1234W	129.5	61.7	46.2	**32.9**
SCV-60021	**3**	**SCV-BAT-6K**	4	20	HRL1234W	181.5	86.7	65.3	**46.8**
SCV-60021	**4**	**SCV-BAT-6K**	5	20	HRL1234W	235.7	112.8	85	**61.1**
SCV-60021	**5**	**SCV-BAT-6K**	6	20	HRL1234W	291.8	139.7	105.4	**75.9**
SCV-60021	**6**	**SCV-BAT-6K**	7	20	HRL1234W	349.5	167.4	126.3	**91.1**
SCV-60021	**7**	**SCV-BAT-6K**	8	20	HRL1234W	408.4	195.7	147.7	**106.6**
SCV-60021	**8**	**SCV-BAT-6K**	9	20	HRL1234W	468.3	224.7	169.6	**122.4**
SCV-60021	**9**	**SCV-BAT-6K**	10	20	HRL1234W	529.1	254.2	191.9	**138.5**
SCV-60021	**10**	**SCV-BAT-6K**	11	20	HRL1234W	590.6	284.2	214.6	**154.9**

6 kVA without ISO (SCV-60022, SCV-60022-240, SCV-60022-P, SCV-60022-P-240)

UPS Model	Add'l Battery Pack Qty	Battery Pack Model Number	Total # Strings	Battery/ String	Battery Part #	25% Load	50% Load	75% Load	100% Load
SCV-60022	**0**	**included w/ UPS**	1	20	HRL1234W	40.7	19.6	11.6	**7.6**
SCV-60022	**1**	**SCV-BAT-6K**	2	20	HRL1234W	93.1	46.7	29.2	**20.5**
SCV-60022	**2**	**SCV-BAT-6K**	3	20	HRL1234W	150	75.8	48	**34.3**
SCV-60022	**3**	**SCV-BAT-6K**	4	20	HRL1234W	210.1	106.4	67.8	**48.7**
SCV-60022	**4**	**SCV-BAT-6K**	5	20	HRL1234W	272.8	138.3	88.3	**63.6**
SCV-60022	**5**	**SCV-BAT-6K**	6	20	HRL1234W	337.7	171.3	109.4	**79**
SCV-60022	**6**	**SCV-BAT-6K**	7	20	HRL1234W	404.3	205.2	131.1	**94.8**
SCV-60022	**7**	**SCV-BAT-6K**	8	20	HRL1234W	472.2	239.9	153.3	**110.9**
SCV-60022	**8**	**SCV-BAT-6K**	9	20	HRL1234W	541.1	275.4	176.1	**127.4**
SCV-60022	**9**	**SCV-BAT-6K**	10	20	HRL1234W	610.9	311.5	199.2	**144.1**
SCV-60022	**10**	**SCV-BAT-6K**	11	20	HRL1234W	681.4	348.3	222.7	**161.2**

Notes:
1) Run Times are based on new batteries and are +/-15%.
2) Extended Battery Packs are “Hot Swappable”, but individual batteries are not.
3) CF = Consult Factory for longer Run Times.

Battery Runtimes – UniStar VP RACK

10 kVA with ISO (SCV-11021, SCV-11021-240, SCV-11021-P, SCV-11021-P-240)

UPS Model	Add'l Battery Pack Qty	Battery Pack Model Number	Total # Strings	Battery/ String	Battery Part #	25% Load	50% Load	75% Load	100% Load
SCV-11021	**0**	**included w/ UPS**	1	20	HRL1234W	18.2	7.3	4.7	**2.5**
SCV-11021	**1**	**SCV-BAT-10K**	2	20	HRL1234W	43.6	19.8	14.3	**9.6**
SCV-11021	**2**	**SCV-BAT-10K**	3	20	HRL1234W	70.9	33.2	24.5	**17**
SCV-11021	**3**	**SCV-BAT-10K**	4	20	HRL1234W	99.7	47.2	35.2	**24.8**
SCV-11021	**4**	**SCV-BAT-10K**	5	20	HRL1234W	129.5	61.7	46.2	**32.9**
SCV-11021	**5**	**SCV-BAT-10K**	6	20	HRL1234W	160.4	76.6	57.5	**41.1**
SCV-11021	**6**	**SCV-BAT-10K**	7	20	HRL1234W	192.2	91.9	69.2	**49.6**
SCV-11021	**7**	**SCV-BAT-10K**	8	20	HRL1234W	224.7	107.5	81	**58.2**
SCV-11021	**8**	**SCV-BAT-10K**	9	20	HRL1234W	258	123.4	93.1	**67**
SCV-11021	**9**	**SCV-BAT-10K**	10	20	HRL1234W	291.8	139.7	105.4	**75.9**
SCV-11021	**10**	**SCV-BAT-10K**	11	20	HRL1234W	326.3	156.2	117.9	**85**

10 kVA without ISO (SCV-11022, SCV-11022-240, SCV-11022-P, SCV-11022-P-240)

UPS Model	Add'l Battery Pack Qty	Battery Pack Model Number	Total # Strings	Battery/ String	Battery Part #	25% Load	50% Load	75% Load	100% Load
SCV-11022	**0**	**included w/ UPS**	1	20	HRL1234W	20	7.8	5.2	**2.9**
SCV-11022	**1**	**SCV-BAT-10K**	2	20	HRL1234W	47.7	21	15.3	**10.3**
SCV-11022	**2**	**SCV-BAT-10K**	3	20	HRL1234W	77.3	35.1	26	**18.2**
SCV-11022	**3**	**SCV-BAT-10K**	4	20	HRL1234W	108.6	49.8	37.3	**26.5**
SCV-11022	**4**	**SCV-BAT-10K**	5	20	HRL1234W	141.1	65.1	48.9	**35**
SCV-11022	**5**	**SCV-BAT-10K**	6	20	HRL1234W	174.7	80.8	60.9	**43.7**
SCV-11022	**6**	**SCV-BAT-10K**	7	20	HRL1234W	209.3	96.9	73.1	**52.7**
SCV-11022	**7**	**SCV-BAT-10K**	8	20	HRL1234W	244.7	113.4	85.6	**61.8**
SCV-11022	**8**	**SCV-BAT-10K**	9	20	HRL1234W	280.9	130.2	98.4	**71.1**
SCV-11022	**9**	**SCV-BAT-10K**	10	20	HRL1234W	317.8	147.4	111.4	**80.5**
SCV-11022	**10**	**SCV-BAT-10K**	11	20	HRL1234W	355.2	164.8	124.5	**90.1**

Notes:
1) Run Times are based on new batteries and are +/-15%.
2) Extended Battery Packs are “Hot Swappable”, but individual batteries are not.
3) CF = Consult Factory for longer Run Times.

Battery Runtimes – UniStar VP TOWER

6 kVA with ISO (SCV-60021T, SCV-60021T-240, SCV-60021T-P, SCV-60021T-P-240)

UPS Model	Battery Pack Qty and Model Number(s)	Total # Strings	Battery/ String	Battery Part #	25% Load	50% Load	75% Load	100% Load
SCV-60021T	No external battery cabinet	1	20	HRL1234W	34.9	15.5	11	**7.2**
SCV-60021T	SCV-BAT-40T	3	20	HRL1234W	129.5	61.7	46.2	**32.9**
SCV-60021T	SCV-BAT-60T	4	20	HRL1234W	181.5	86.7	65.3	**46.8**
SCV-60021T	(2) SCV-BAT-40T	5	20	HRL1234W	235.7	112.8	85	**61.1**
SCV-60021T	(1) SCV-BAT-40T & (1) SCV-BAT-60T	6	20	HRL1234W	291.8	139.7	105.4	**75.9**
SCV-60021T	(2) SCV-BAT-60T	7	20	HRL1234W	349.5	167.4	126.3	**91.1**
SCV-60021T	(1) SCV-BAT-60T & (2) SCV-BAT-40T	8	20	HRL1234W	408.4	195.7	147.7	**106.6**
SCV-60021T	(2) SCV-BAT-60T & (1) SCV-BAT-40T	9	20	HRL1234W	468.3	224.7	169.6	**122.4**
SCV-60021T	(3) SCV-BAT-60T	10	20	HRL1234W	529.1	254.2	191.9	**138.5**
SCV-60021T	(2) SCV-BAT-60T & (2) SCV-BAT-40T	11	20	HRL1234W	590.6	284.2	214.6	**154.9**
SCV-60021T	(3) SCV-BAT-60T & (1) SCV-BAT-40T	12	20	HRL1234W	652.6	314.7	237.6	**171.5**
SCV-60021T	(4) SCV-BAT-60T	13	20	HRL1234W	715.1	345.5	260.9	**188.4**
SCV-60021T	(3) SCV-BAT-60T & (2) SCV-BAT-40T	14	20	HRL1234W	778.2	376.8	284.6	**205.5**
SCV-60021T	(4) SCV-BAT-60T & (1) SCV-BAT-40T	15	20	HRL1234W	841.9	408.3	308.5	**222.8**
SCV-60021T	(5) SCV-BAT-60T	16	20	HRL1234W	906.6	440.2	332.7	**240.2**
SCV-60021T	(4) SCV-BAT-60T & (2) SCV-BAT-40T	17	20	HRL1234W	972.6	472.3	357.1	**257.9**
SCV-60021T	(5) SCV-BAT-60T & (1) SCV-BAT-40T	18	20	HRL1234W	1040.5	504.6	381.7	**275.8**
SCV-60021T	(6) SCV-BAT-60T	19	20	HRL1234W	1111	537.2	406.6	**293.8**
SCV-60021T	(5) SCV-BAT-60T & (2) SCV-BAT-40T	20	20	HRL1234W	1185.3	569.9	431.6	**312**
SCV-60021T	(6) SCV-BAT-60T & (1) SCV-BAT-40T	21	20	HRL1234W	1200 minu	602.8	456.8	**330.3**
SCV-60021T	(7) SCV-BAT-60T	22	20	HRL1234W	1200 minu	635.8	482.1	**348.7**

6 kVA without ISO (SCV-60022T, SCV-60022T-240, SCV-60022T-P, SCV-60022T-P-240)

UPS Model	Battery Pack Qty and Model Number(s)	Total # Strings	Battery/ String	Battery Part #	25% Load	50% Load	75% Load	100% Load
SCV-60022T	No external battery cabinet	1	20	HRL1234W	40.7	19.6	11.6	**7.6**
SCV-60022T	SCV-BAT-40T	3	20	HRL1234W	150	75.8	48	**34.3**
SCV-60022T	SCV-BAT-60T	4	20	HRL1234W	210.1	106.4	67.8	**48.7**
SCV-60022T	(2) SCV-BAT-40T	5	20	HRL1234W	272.8	138.3	88.3	**63.6**
SCV-60022T	(1) SCV-BAT-40T & (1) SCV-BAT-60T	6	20	HRL1234W	337.7	171.3	109.4	**79**
SCV-60022T	(2) SCV-BAT-60T	7	20	HRL1234W	404.3	205.2	131.1	**94.8**
SCV-60022T	(1) SCV-BAT-60T & (2) SCV-BAT-40T	8	20	HRL1234W	472.2	239.9	153.3	**110.9**
SCV-60022T	(2) SCV-BAT-60T & (1) SCV-BAT-40T	9	20	HRL1234W	541.1	275.4	176.1	**127.4**
SCV-60022T	(3) SCV-BAT-60T	10	20	HRL1234W	610.9	311.5	199.2	**144.1**
SCV-60022T	(2) SCV-BAT-60T & (2) SCV-BAT-40T	11	20	HRL1234W	681.4	348.3	222.7	**161.2**
SCV-60022T	(3) SCV-BAT-60T & (1) SCV-BAT-40T	12	20	HRL1234W	752.6	385.5	246.6	**178.5**
SCV-60022T	(4) SCV-BAT-60T	13	20	HRL1234W	824.5	423.2	270.9	**196**
SCV-60022T	(3) SCV-BAT-60T & (2) SCV-BAT-40T	14	20	HRL1234W	897.6	461.2	295.4	**213.8**
SCV-60022T	(4) SCV-BAT-60T & (1) SCV-BAT-40T	15	20	HRL1234W	972.2	499.6	320.2	**231.8**
SCV-60022T	(5) SCV-BAT-60T	16	20	HRL1234W	1049.2	538.4	345.3	**250**
SCV-60022T	(4) SCV-BAT-60T & (2) SCV-BAT-40T	17	20	HRL1234W	1129.9	577.3	370.7	**268.4**
SCV-60022T	(5) SCV-BAT-60T & (1) SCV-BAT-40T	18	20	HRL1234W	1200 minu	616.5	396.2	**286.9**
SCV-60022T	(6) SCV-BAT-60T	19	20	HRL1234W	1200 minu	656	422	**305.7**
SCV-60022T	(5) SCV-BAT-60T & (2) SCV-BAT-40T	20	20	HRL1234W	1200 minu	695.6	447.9	**324.6**
SCV-60022T	(6) SCV-BAT-60T & (1) SCV-BAT-40T	21	20	HRL1234W	1200 minu	735.4	474	**343.6**
SCV-60022T	(7) SCV-BAT-60T	22	20	HRL1234W	1200 minu	775.5	500.3	**362.8**

Notes:
1) Run Times are based on new batteries and are +/-15%.
2) Extended Battery Packs are “Hot Swappable”, but individual batteries are not.
3) CF = Consult Factory for longer Run Times.

Battery Runtimes – UniStar VP TOWER

10 kVA with ISO (SCV-11021T, SCV-11021T-240, SCV-11021T-P, SCV-11021T-P-240)

UPS Model	Battery Pack Qty and Model Number(s)	Total # Strings	Battery/ String	Battery Part #	25% Load	50% Load	75% Load	100% Load
SCV-11021T	**No external battery cabinet**	1	20	HRL1234W	18.2	7.3	4.7	**2.5**
SCV-11021T	**SCV-BAT-40T**	3	20	HRL1234W	70.9	33.2	24.5	**17**
SCV-11021T	**SCV-BAT-60T**	4	20	HRL1234W	99.7	47.2	35.2	**24.8**
SCV-11021T	**(2) SCV-BAT-40T**	5	20	HRL1234W	129.5	61.7	46.2	**32.9**
SCV-11021T	**(1) SCV-BAT-40T & (1) SCV-BAT-60T**	6	20	HRL1234W	160.4	76.6	57.5	**41.1**
SCV-11021T	**(2) SCV-BAT-60T**	7	20	HRL1234W	192.2	91.9	69.2	**49.6**
SCV-11021T	**(1) SCV-BAT-60T & (2) SCV-BAT-40T**	8	20	HRL1234W	224.7	107.5	81	**58.2**
SCV-11021T	**(2) SCV-BAT-60T & (1) SCV-BAT-40T**	9	20	HRL1234W	258	123.4	93.1	**67**
SCV-11021T	**(3) SCV-BAT-60T**	10	20	HRL1234W	291.8	139.7	105.4	**75.9**
SCV-11021T	**(2) SCV-BAT-60T & (2) SCV-BAT-40T**	11	20	HRL1234W	326.3	156.2	117.9	**85**
SCV-11021T	**(3) SCV-BAT-60T & (1) SCV-BAT-40T**	12	20	HRL1234W	361.2	173	130.5	**94.1**
SCV-11021T	**(4) SCV-BAT-60T**	13	20	HRL1234W	396.5	190	143.4	**103.4**
SCV-11021T	**(3) SCV-BAT-60T & (2) SCV-BAT-40T**	14	20	HRL1234W	432.3	207.2	156.4	**112.9**
SCV-11021T	**(4) SCV-BAT-60T & (1) SCV-BAT-40T**	15	20	HRL1234W	468.3	224.7	169.6	**122.4**
SCV-11021T	**(5) SCV-BAT-60T**	16	20	HRL1234W	504.7	242.3	182.9	**132**
SCV-11021T	**(4) SCV-BAT-60T & (2) SCV-BAT-40T**	17	20	HRL1234W	541.4	260.2	196.4	**141.8**
SCV-11021T	**(5) SCV-BAT-60T & (1) SCV-BAT-40T**	18	20	HRL1234W	578.2	278.2	210	**151.6**
SCV-11021T	**(6) SCV-BAT-60T**	19	20	HRL1234W	615.3	296.3	223.7	**161.5**
SCV-11021T	**(5) SCV-BAT-60T & (2) SCV-BAT-40T**	20	20	HRL1234W	652.6	314.7	237.6	**171.5**
SCV-11021T	**(6) SCV-BAT-60T & (1) SCV-BAT-40T**	21	20	HRL1234W	690	333.1	251.5	**181.6**
SCV-11021T	**(7) SCV-BAT-60T**	22	20	HRL1234W	727.7	351.7	265.6	**191.8**

10 kVA without ISO (SCV-11022T, SCV-11022T-240, SCV-11022T-P, SCV-11022T-P-240)

UPS Model	Battery Pack Qty and Model Number(s)	Total # Strings	Battery/ String	Battery Part #	25% Load	50% Load	75% Load	100% Load
SCV-11022T	**No external battery cabinet**	1	20	HRL1234W	20	7.8	5.2	**2.9**
SCV-11022T	**SCV-BAT-40T**	3	20	HRL1234W	77.3	35.1	26	**18.2**
SCV-11022T	**SCV-BAT-60T**	4	20	HRL1234W	108.6	49.8	37.3	**26.5**
SCV-11022T	**(2) SCV-BAT-40T**	5	20	HRL1234W	141.1	65.1	48.9	**35**
SCV-11022T	**(1) SCV-BAT-40T & (1) SCV-BAT-60T**	6	20	HRL1234W	174.7	80.8	60.9	**43.7**
SCV-11022T	**(2) SCV-BAT-60T**	7	20	HRL1234W	209.3	96.9	73.1	**52.7**
SCV-11022T	**(1) SCV-BAT-60T & (2) SCV-BAT-40T**	8	20	HRL1234W	244.7	113.4	85.6	**61.8**
SCV-11022T	**(2) SCV-BAT-60T & (1) SCV-BAT-40T**	9	20	HRL1234W	280.9	130.2	98.4	**71.1**
SCV-11022T	**(3) SCV-BAT-60T**	10	20	HRL1234W	317.8	147.4	111.4	**80.5**
SCV-11022T	**(2) SCV-BAT-60T & (2) SCV-BAT-40T**	11	20	HRL1234W	355.2	164.8	124.5	**90.1**
SCV-11022T	**(3) SCV-BAT-60T & (1) SCV-BAT-40T**	12	20	HRL1234W	393.2	182.5	137.9	**99.8**
SCV-11022T	**(4) SCV-BAT-60T**	13	20	HRL1234W	431.6	200.4	151.5	**109.7**
SCV-11022T	**(3) SCV-BAT-60T & (2) SCV-BAT-40T**	14	20	HRL1234W	470.4	218.6	165.3	**119.7**
SCV-11022T	**(4) SCV-BAT-60T & (1) SCV-BAT-40T**	15	20	HRL1234W	509.6	237	179.2	**129.8**
SCV-11022T	**(5) SCV-BAT-60T**	16	20	HRL1234W	549	255.6	193.3	**140**
SCV-11022T	**(4) SCV-BAT-60T & (2) SCV-BAT-40T**	17	20	HRL1234W	588.7	274.5	207.5	**150.3**
SCV-11022T	**(5) SCV-BAT-60T & (1) SCV-BAT-40T**	18	20	HRL1234W	628.7	293.4	221.8	**160.7**
SCV-11022T	**(6) SCV-BAT-60T**	19	20	HRL1234W	668.8	312.6	236.4	**171.2**
SCV-11022T	**(5) SCV-BAT-60T & (2) SCV-BAT-40T**	20	20	HRL1234W	709.2	331.9	251	**181.8**
SCV-11022T	**(6) SCV-BAT-60T & (1) SCV-BAT-40T**	21	20	HRL1234W	749.8	351.4	265.7	**192.5**
SCV-11022T	**(7) SCV-BAT-60T**	22	20	HRL1234W	790.7	371	280.6	**203.3**

Notes:
1) Run Times are based on new batteries and are +/-15%.
2) Extended Battery Packs are “Hot Swappable”, but individual batteries are not.
3) CF = Consult Factory for longer Run Times.

Ordering instructions:

1. Purchase order to be made out to:
   Staco Energy Products Co.
   1229 Byers Road
   Miamisburg, OH 45342
2. Purchase order must include:
   - Payment terms: Net 30 days
3. Please email any purchase order with initialed Terms & Conditions, Credit Information and Resale Certificate (if not on file and for resale) to your Director, Regional Sales.

Staco Energy Products Co.
1229 Byers Rd.
Miamisburg, OH 45342
(866) 261-1191 Toll Free
(937) 253-1723 Fax
Sales@StacoEnergy.com