



SOLAR STIK®



Dari Power System Options



Table of Contents

Contents

Systems

System #1: G#6.2 (1/1 System)	3
System #2: G#3.2 (1/1 System)	4
System #3: T#1 (1/1 System).....	5
System #4: T#3 (1/1 System).....	6
System #5: T#5 (1/1 System).....	7
System #6: G#4.2 (1/1 System)	8
System #7: G#9.2 (1/1 System)	9
System #8: G#3.1 (1/1 System)	10
System #9: T#2 (1/1 System).....	11
System #10: T#4 (1/1 System).....	12
System #11: G#6.1 (1/2 System)	13
System #12: G#6.1 (2/2 System)	14
System #13: G#7 (1/2 System)	15
System #14: G#7 (2/2 System)	16
System #15: G#4.1 (1/2 System)	17
System #16: G#4.1 (2/2 System)	18
System #17: G#9.1 (1/2 System)	19
System #18: G#9.1 (2/2 System)	20
System #19: G#1 (1/2 System)	21

System #20: G#1 (2/2 System)	22
System #21: G#8 (1/2 System)	23
System #22: G#8 (2/2 System)	24
System #23: G#5 (1/2 System)	25
System #24: G#5 (2/2 System)	26
System #25: G#10 (1/2 System)	27
System #26: G#10 (2/2 System)	28
System #27: G#2 (1/3 System)	29
System #28: G#2 (2/3 System)	30
System #29: G#2 (3/3 System)	31



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#6.2	1	1500	0	2750	0	600	3	200	1	3000	5100



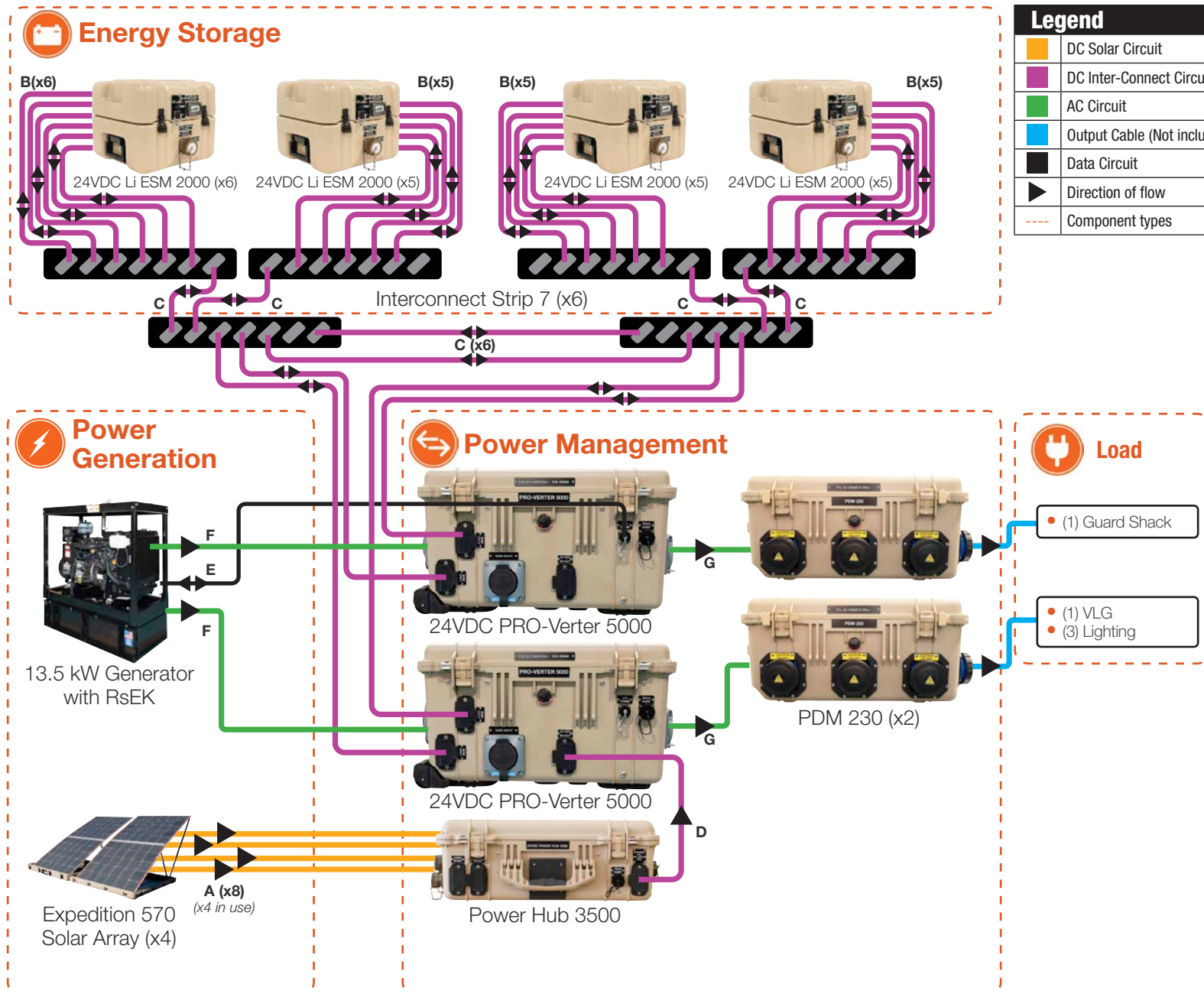
13.5 kW Generator with RsEK (backup)



Cable Case (x4)



PRO-Verter RMK (AGS) (x2)
Mounts to PRO-Verter Faceplate



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- Site Lighting:** ~200 W each for 12 hours daily
- Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load	3000 W	PRO-Verter 2 Load	2100 W
VLG		1 VLG	1500 W
Road Blockers		Road Blockers	
Spikes		Spikes	
Lighting		3 Lighting	600 W
1 Guard Shack	3000 W	Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	2
-	20-0702604	PRO-VERTER RMK (AGS)	2
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	21
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	4
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	21
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	10
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	2
-	20-0002515	PDM 230 VAC	2



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#3.2	1	1500	0	2750	2	600	2	200	1	3000	6100



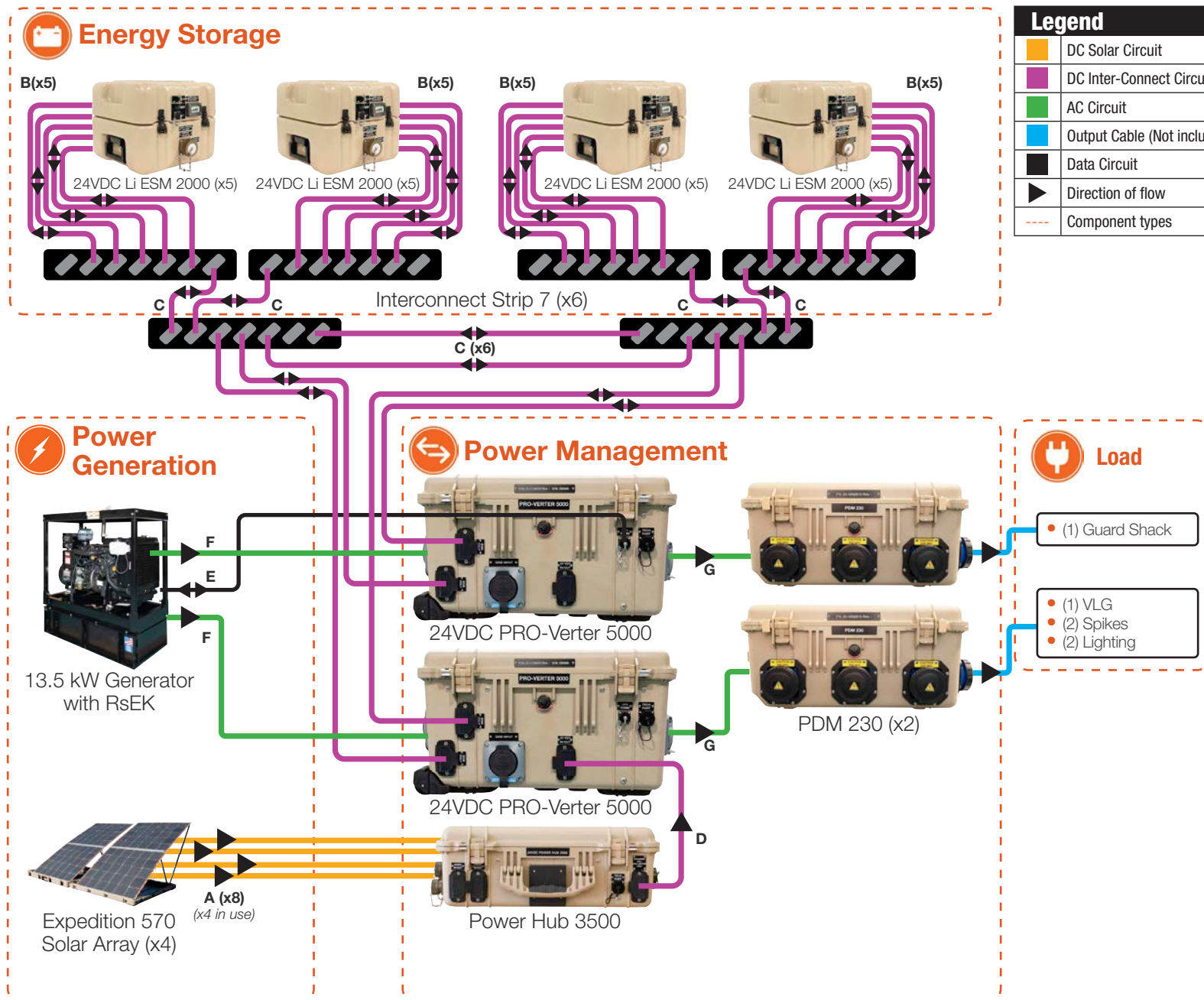
13.5 kW Generator with RsEK (backup)



Cable Case (x4)



PRO-Verter RMK (AGS) (x2)
Mounts to PRO-Verter Faceplate



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- Site Lighting:** ~200 W each for 12 hours daily
- Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.

RMK capability included in PRO-Verter.

	PRO-Verter 1 Load	3000 W
VLG		
Road Blockers		
Spikes		
Lighting		
1 Guard Shack	3000 W	

	PRO-Verter 2 Load	3100 W
1 VLG	1500 W	
Road Blockers		
2 Spikes	1200 W	
2 Lighting	400 W	
Guard Shack		

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	2
-	20-0702604	PRO-VERTER RMK (AGS)	2
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	20
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	4
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	20
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	10
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	2
-	20-0002515	PDM 230 VAC	2



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
T#1	1	1500	1	2750	0	600	2	200	1	3000	7650



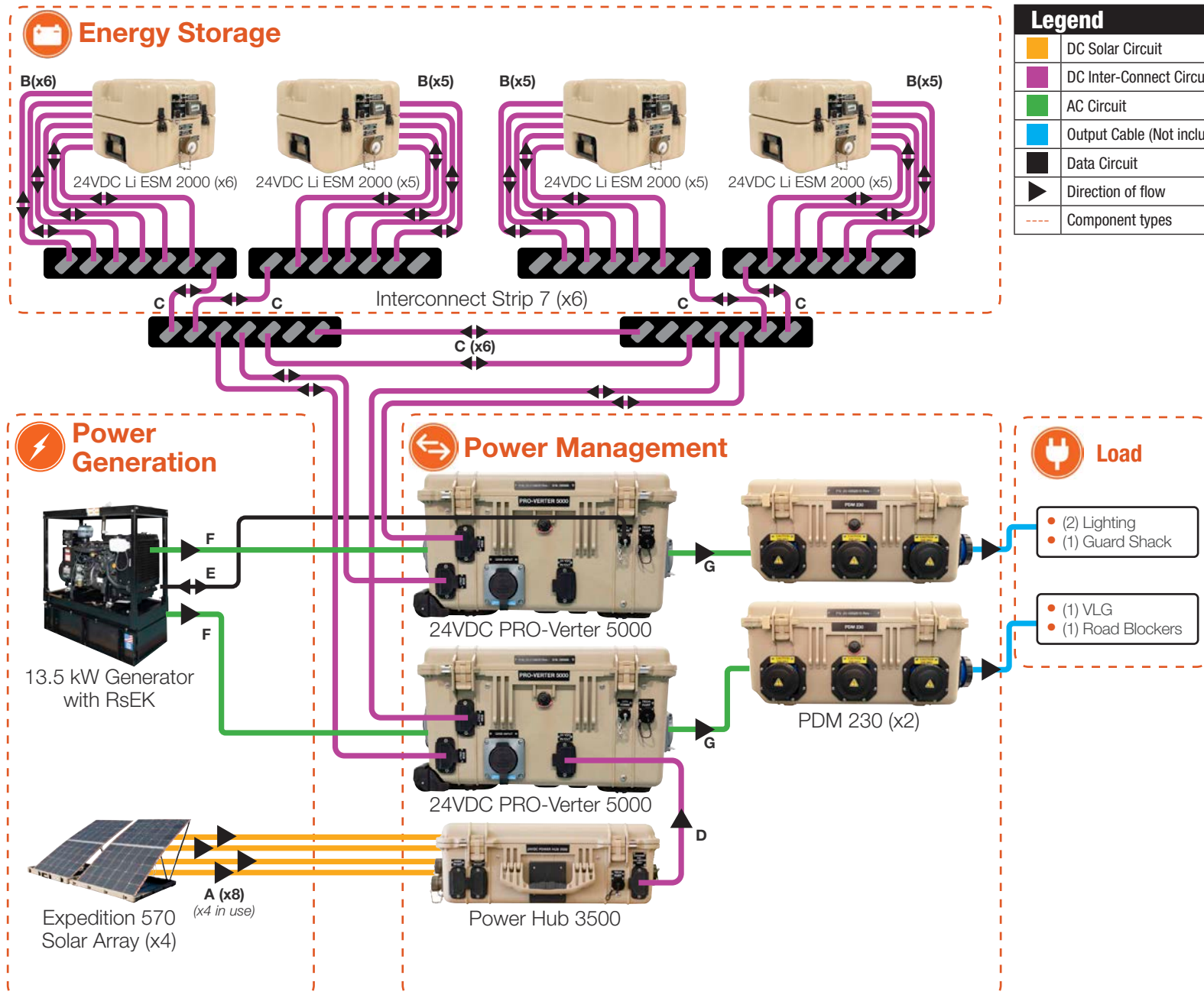
13.5 kW Generator with RsEK (backup)



Cable Case (x4)



PRO-Verter RMK (AGS) (x2)
Mounts to PRO-Verter Faceplate



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- Site Lighting:** ~200 W each for 12 hours daily
- Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load	3400 W
VLG	
Road Blockers	
Spikes	
2 Lighting	400 W
1 Guard Shack	3000 W

PRO-Verter 2 Load	4250 W
1 VLG	1500 W
1 Road Blockers	2750 W
Spikes	
Lighting	
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	2
-	20-0702604	PRO-VERTER RMK (AGS)	2
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	21
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	4
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	21
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	10
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	2
-	20-0002515	PDM 230 VAC	2



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
T#3	1	1500	1	2750	0	600	2	200	1	3000	7650



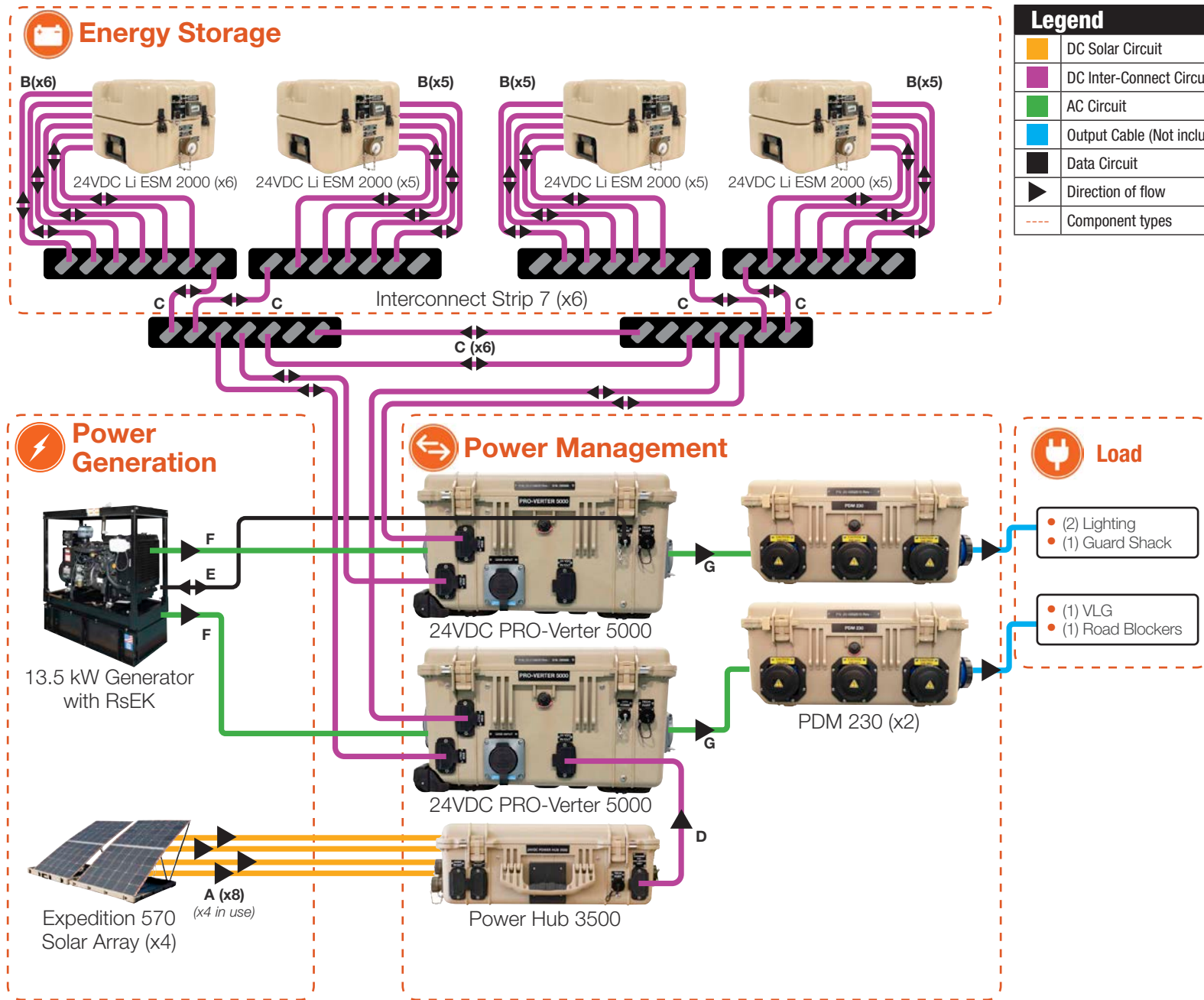
13.5 kW Generator with RsEK (backup)



Cable Case (x4)



PRO-Verter RMK (AGS) (x2)
Mounts to PRO-Verter Faceplate



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- **Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- **Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- **Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- **Site Lighting:** ~200 W each for 12 hours daily
- **Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load	3400 W
VLG	
Road Blockers	
Spikes	
2 Lighting	400 W
1 Guard Shack	3000 W

PRO-Verter 2 Load	4250 W
1 VLG	1500 W
1 Road Blockers	2750 W
Spikes	
Lighting	
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	2
-	20-0702604	PRO-VERTER RMK (AGS)	2
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	21
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	4
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	21
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	10
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	2
-	20-0002515	PDM 230 VAC	2



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
T#5	1	1500	1	2750	0	600	2	200	1	3000	7650



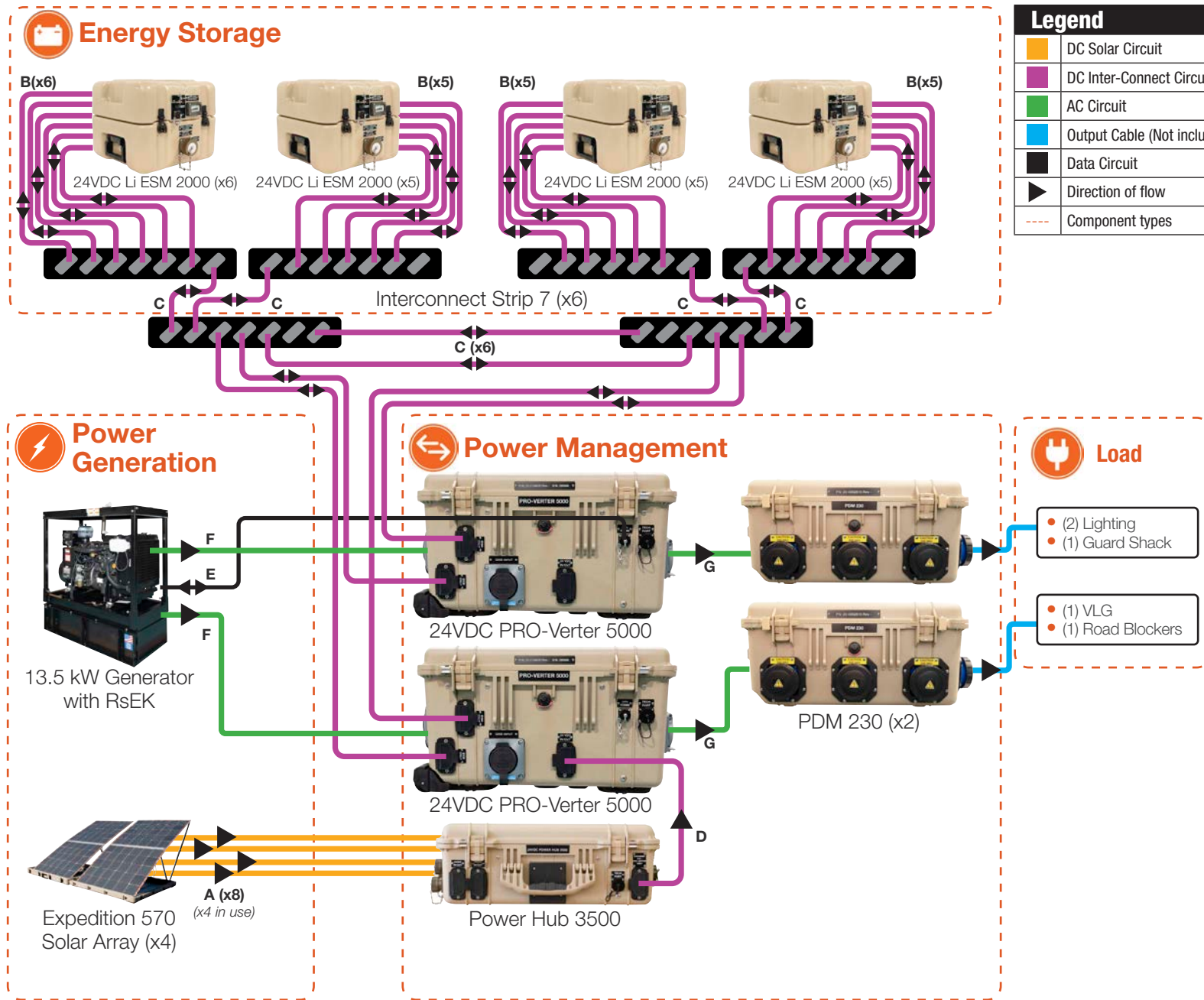
13.5 kW Generator with RsEK (backup)



Cable Case (x4)



PRO-Verter RMK (AGS) (x2)
Mounts to PRO-Verter Faceplate



Legend	
■	DC Solar Circuit
■	DC Inter-Connect Circuit
■	AC Circuit
■	Output Cable (Not included)
■	Data Circuit
▶	Direction of flow
---	Component types

System sized to handle following loads.
System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

- Load (W)**
- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
 - Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
 - Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
 - Site Lighting:** ~200 W each for 12 hours daily
 - Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load	3400 W
VLG	
Road Blockers	
Spikes	
2 Lighting	400 W
1 Guard Shack	3000 W

PRO-Verter 2 Load	4250 W
1 VLG	1500 W
1 Road Blockers	2750 W
Spikes	
Lighting	
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	2
-	20-0702604	PRO-VERTER RMK (AGS)	2
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	21
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	4
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	21
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	10
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	2
-	20-0002515	PDM 230 VAC	2



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#4.2	2	1500	0	2750	2	600	4	200	1	3000	8000



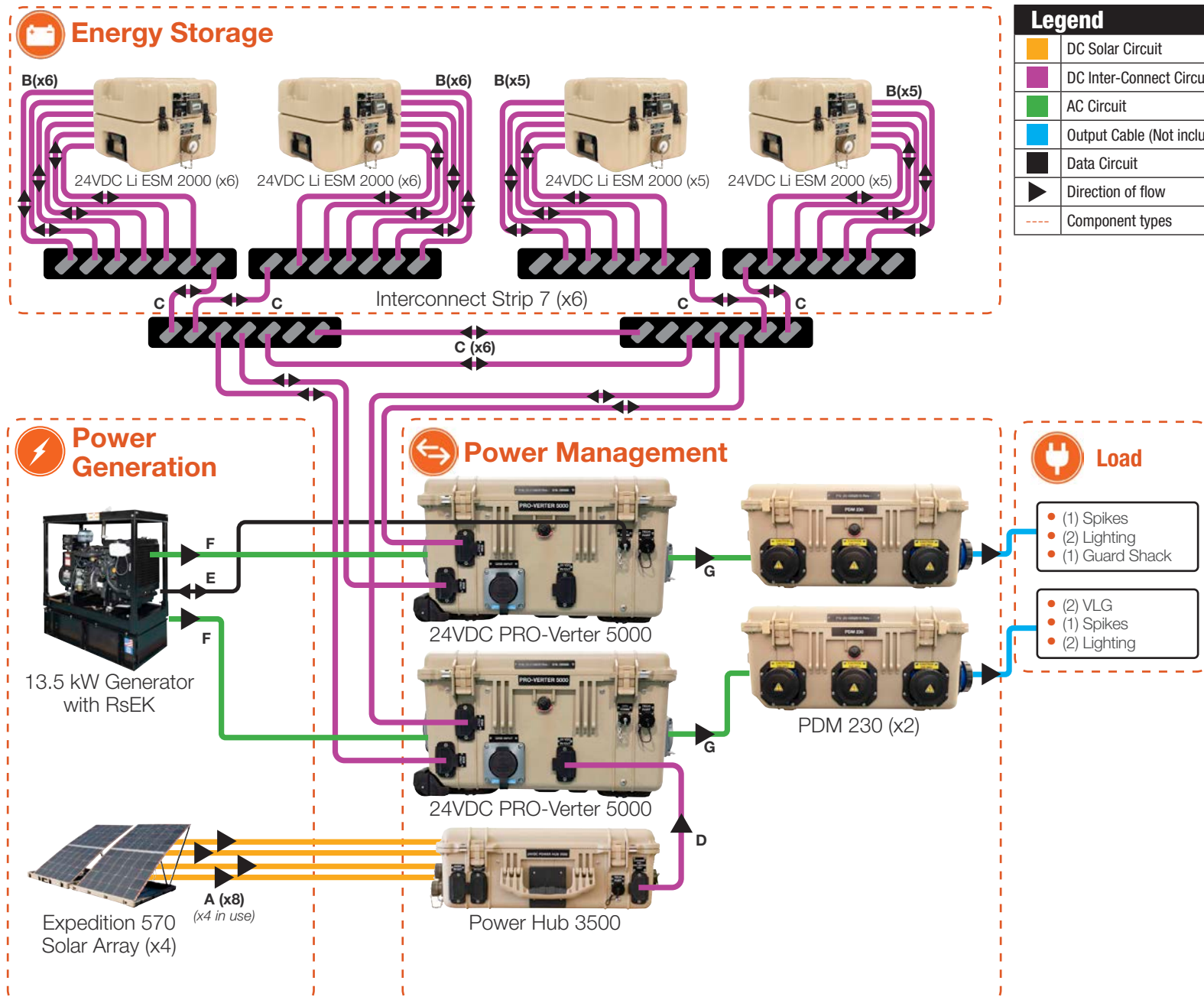
13.5 kW Generator with RsEK (backup)



Cable Case (x4)



PRO-Verter RMK (AGS) (x2)
Mounts to PRO-Verter Faceplate



Legend

DC Solar Circuit
DC Inter-Connect Circuit
AC Circuit
Output Cable (Not included)
Data Circuit
Direction of flow
Component types

System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- Site Lighting:** ~200 W each for 12 hours daily
- Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.

RMK capability included in PRO-Verter.

PRO-Verter 1 Load		PRO-Verter 2 Load	
VLG	4000 W	2 VLG	3000 W
Road Blockers		Road Blockers	
1 Spikes	600 W	1 Spikes	600 W
2 Lighting	400 W	2 Lighting	400 W
1 Guard Shack	3000 W	Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	2
-	20-0702604	PRO-VERTER RMK (AGS)	2
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	22
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	4
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	22
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	10
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	2
-	20-0002515	PDM 230 VAC	2



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#9.2	2	1500	0	2750	2	600	6	200	1	3000	8400



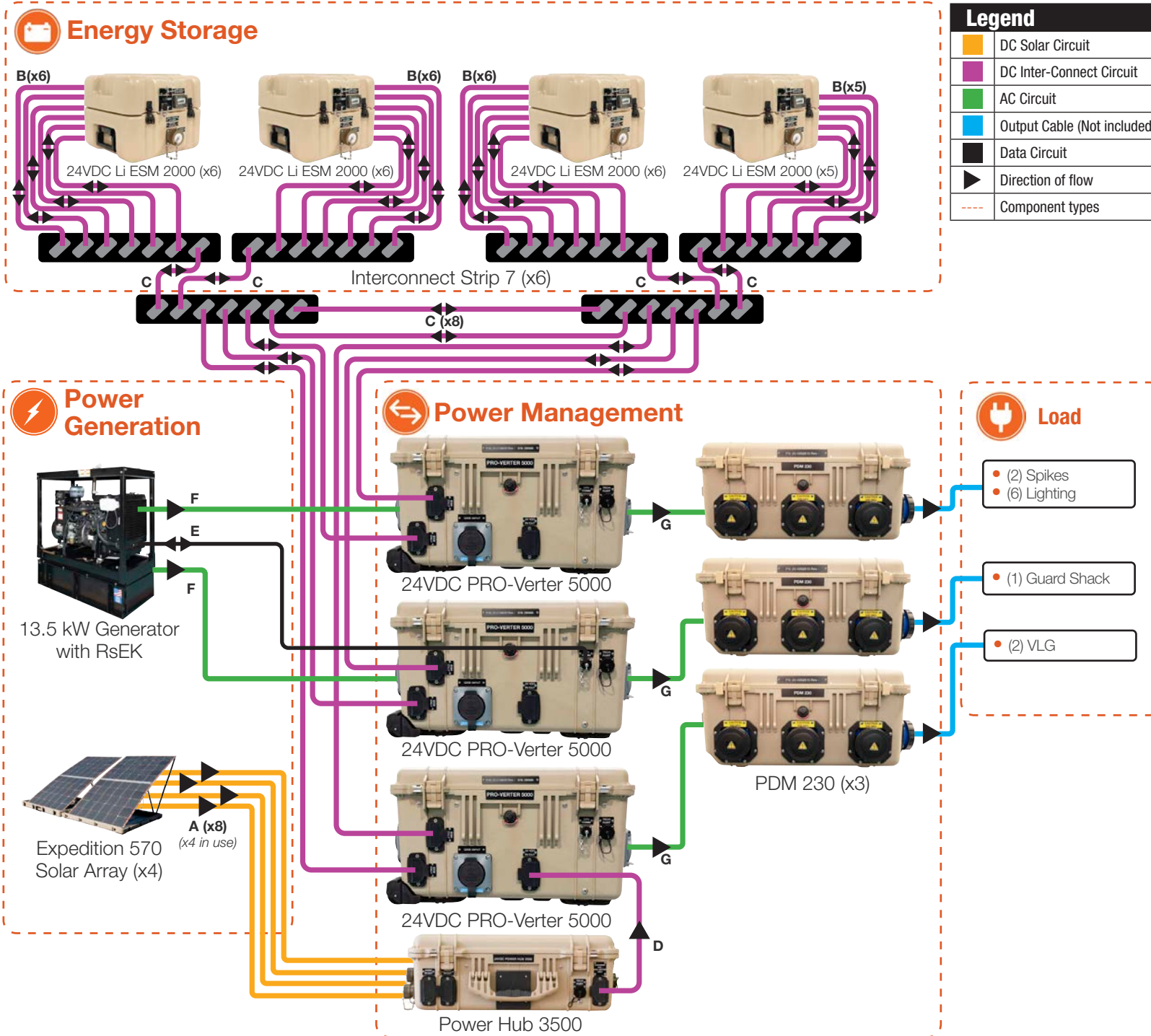
13.5 kW Generator with RsEK (backup)



Cable Case (x4)



PRO-Verter RMK (AGS) (x3)
Mounts to PRO-Verter Faceplate



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- Site Lighting:** ~200 W each for 12 hours daily
- Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load	2400 W
VLG	
Road Blockers	
2 Spikes	1200 W
6 Lighting	1200 W
Guard Shack	

PRO-Verter 2 Load	3000 W
VLG	
Road Blockers	
Spikes	
Lighting	
1 Guard Shack	3000 W

PRO-Verter 3 Load	3000 W
2 VLG	3000 W
Road Blockers	
Spikes	
Lighting	
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	3
-	20-0702604	PRO-VERTER RMK (AGS)	3
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	23
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	4
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	23
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	12
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	3
-	20-0002515	PDM 230 VAC	3



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#3.1	1	1500	2	2750	0	600	2	200	1	3000	10400



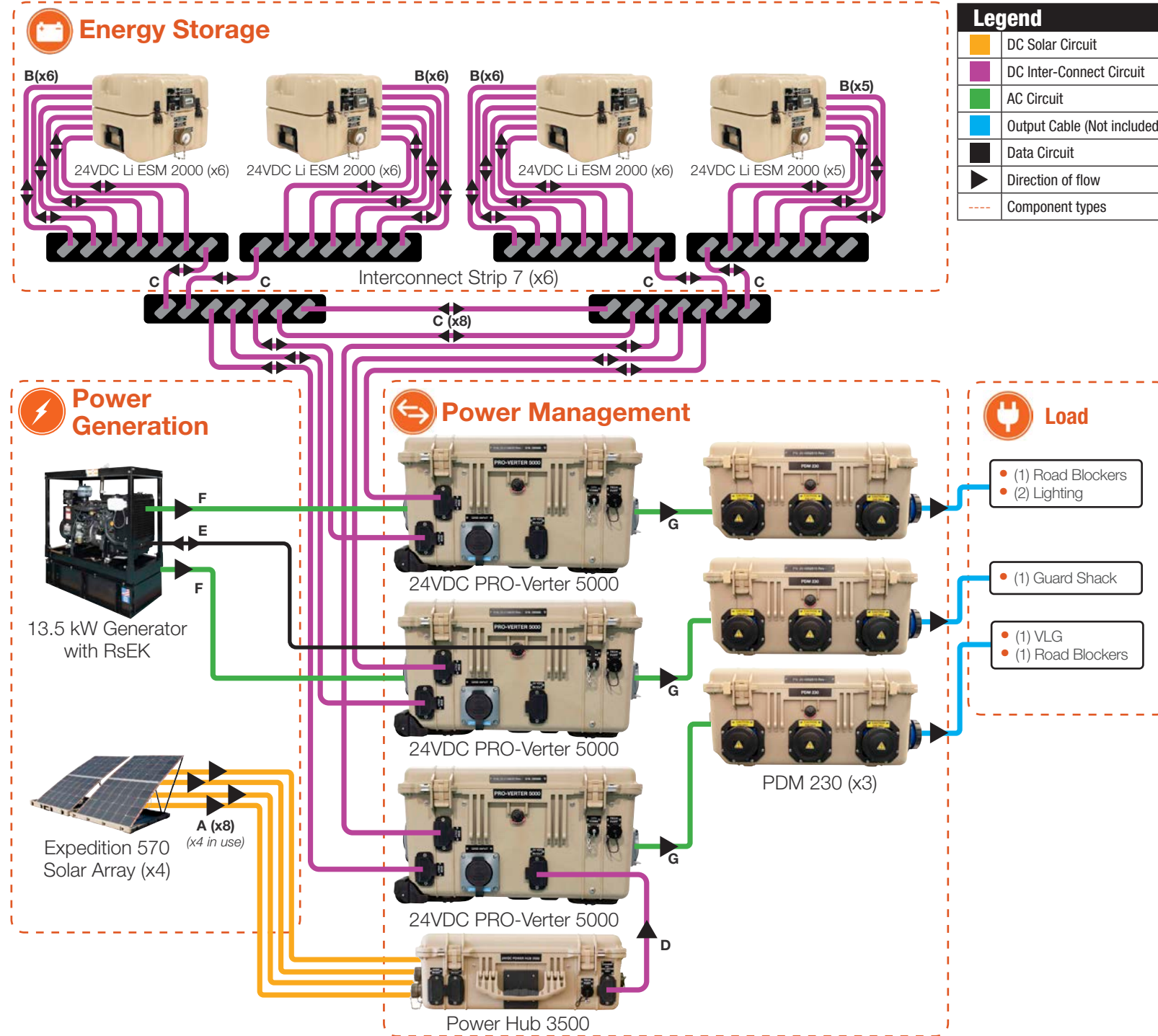
13.5 kW Generator with RsEK (backup)



Cable Case (x4)



PRO-Verter RMK (AGS) (x3)
Mounts to PRO-Verter Faceplate



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- Site Lighting:** ~200 W each for 12 hours daily
- Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load	Power (W)
VLG	3150 W
1 Road Blockers	2750 W
Spikes	
2 Lighting	400 W
Guard Shack	

PRO-Verter 2 Load	Power (W)
VLG	3000 W
Road Blockers	
Spikes	
Lighting	
1 Guard Shack	3000 W

PRO-Verter 3 Load	Power (W)
1 VLG	4250 W
1 Road Blockers	2750 W
Spikes	
Lighting	
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	3
-	20-0702604	PRO-VERTER RMK (AGS)	3
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	23
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RSEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RSEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	4
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	23
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	12
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	3
-	20-0002515	PDM 230 VAC	3



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
T#2	1	1500	2	2750	0	600	2	200	1	3000	10400



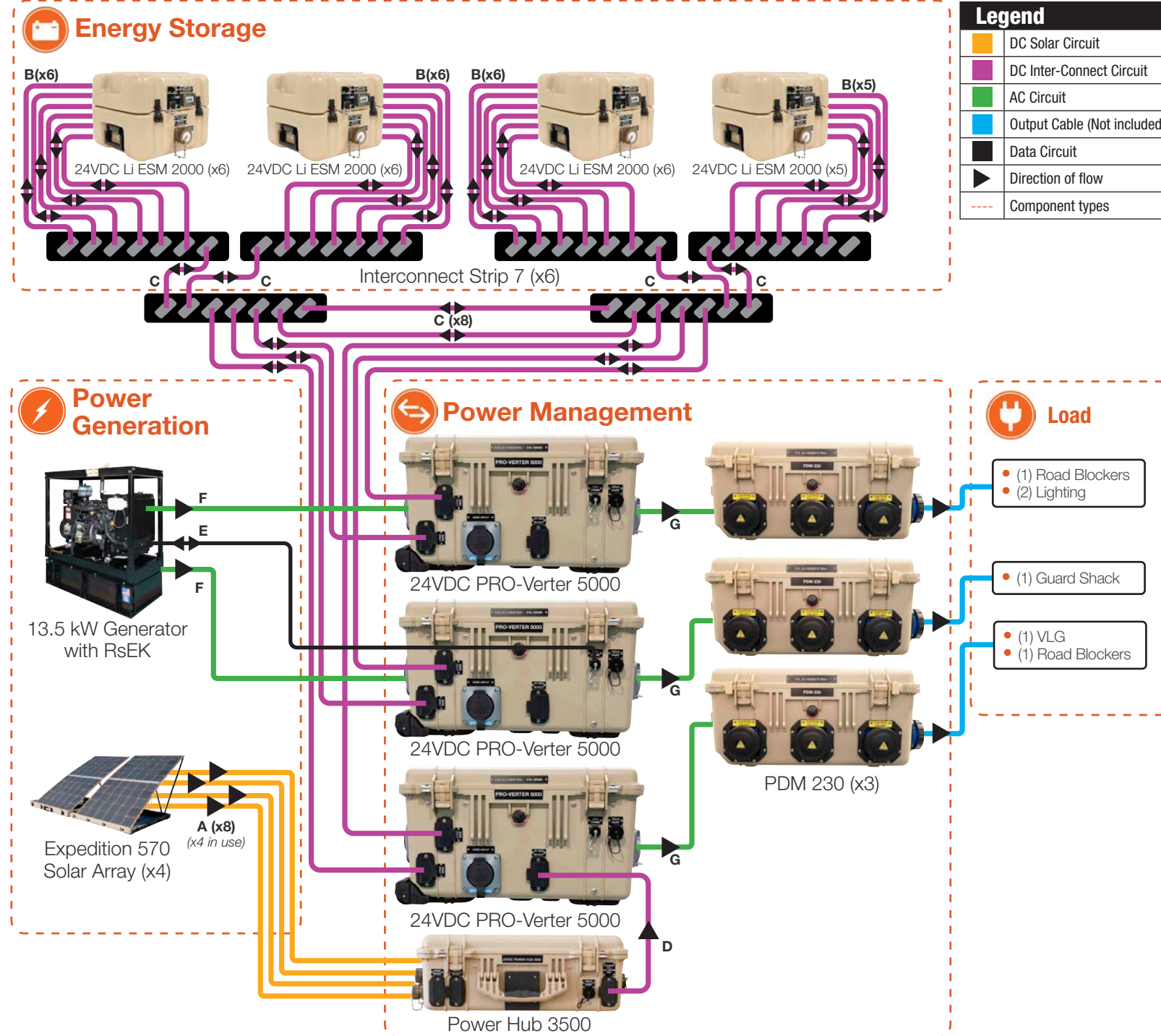
13.5 kW Generator with RsEK (backup)



Cable Case (x4)



PRO-Verter RMK (AGS) (x3)
Mounts to PRO-Verter Faceplate



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- **Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- **Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- **Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- **Site Lighting:** ~200 W each for 12 hours daily
- **Guard Shack:** ~ 3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load	Power (W)
VLG	1500 W
1 Road Blockers	2750 W
Spikes	
2 Lighting	400 W
Guard Shack	

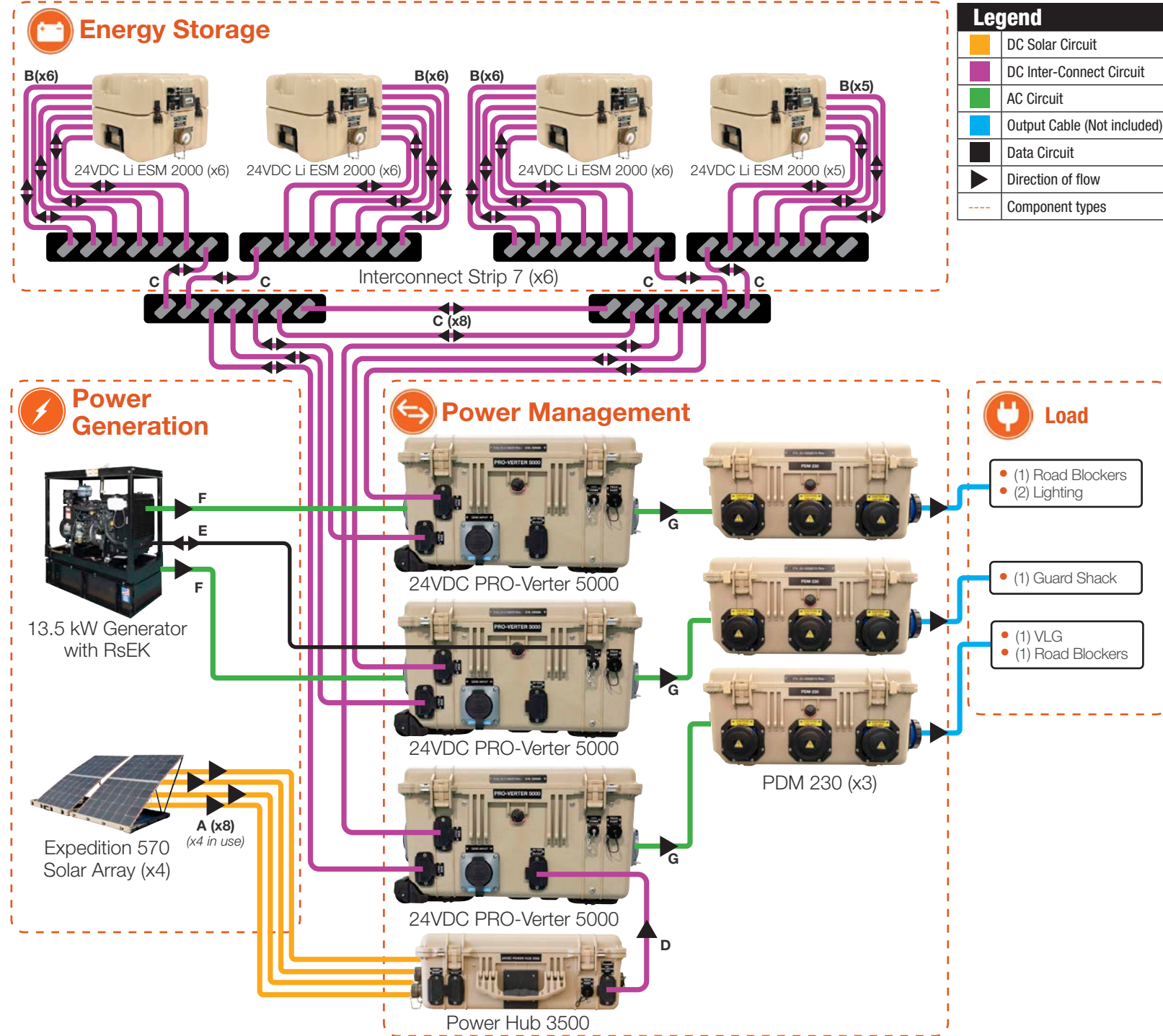
PRO-Verter 2 Load	Power (W)
VLG	1500 W
Road Blockers	
Spikes	
Lighting	
1 Guard Shack	3000 W

PRO-Verter 3 Load	Power (W)
1 VLG	1500 W
1 Road Blockers	2750 W
Spikes	
Lighting	
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	3
-	20-0702604	PRO-VERTER RMK (AGS)	3
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	23
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	4
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	23
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	12
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	3
-	20-0002515	PDM 230 VAC	3



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
T#4	1	1500	2	2750	0	600	2	200	1	3000	10400



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- Site Lighting:** ~200 W each for 12 hours daily
- Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load	3150 W
VLG	
1 Road Blockers	2750 W
Spikes	
2 Lighting	400 W
Guard Shack	

PRO-Verter 2 Load	3000 W
VLG	
Road Blockers	
Spikes	
Lighting	
1 Guard Shack	3000 W

PRO-Verter 3 Load	4250 W
1 VLG	1500 W
1 Road Blockers	2750 W
Spikes	
Lighting	
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	3
-	20-0702604	PRO-VERTER RMK (AGS)	3
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	23
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	4
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	23
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	12
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	3
-	20-0002515	PDM 230 VAC	3



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#6.1	1	1500	3	2750	0	600	3	200	1	3000	13350



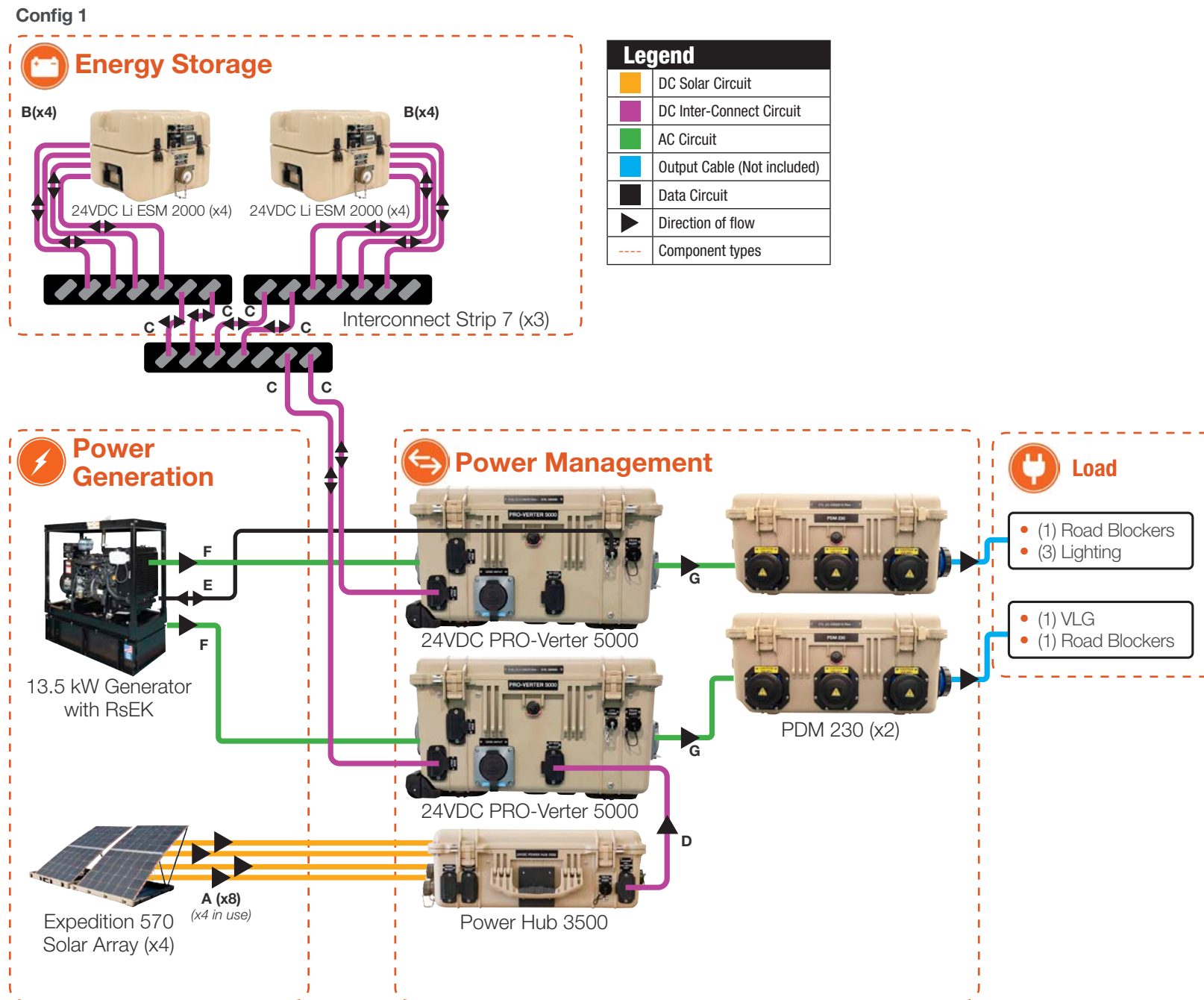
13.5 kW Generator with RsEK (backup)



Cable Case (x2)



PRO-Verter RMK (AGS) (x2)
Mounts to PRO-Verter Faceplate



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- Site Lighting:** ~200 W each for 12 hours daily
- Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

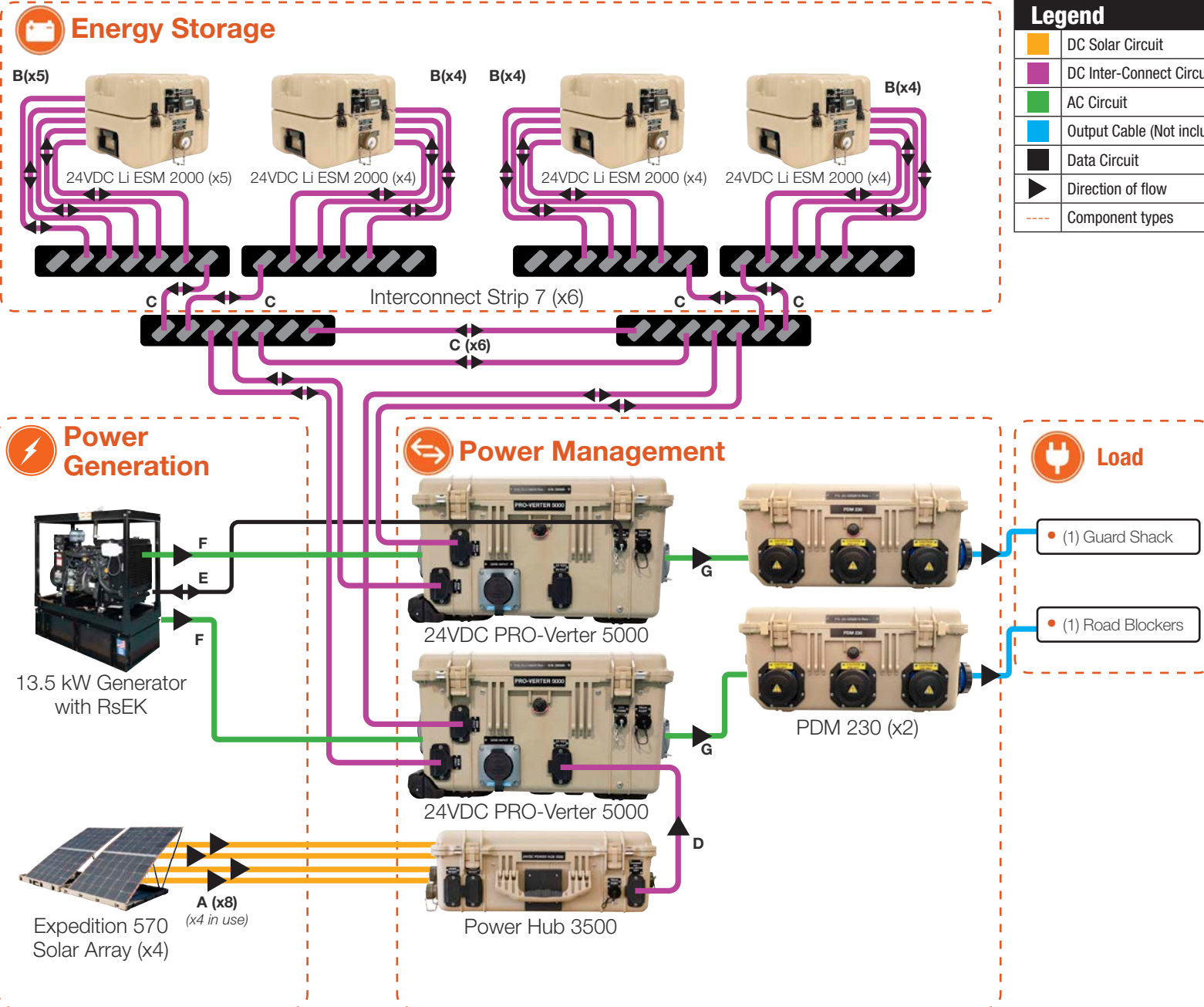
PRO-Verter 1 Load		PRO-Verter 2 Load	
VLG		1 VLG	1500 W
1 Road Blockers	2750 W	1 Road Blockers	2750 W
Spikes		Spikes	
3 Lighting	600 W	Lighting	
Guard Shack		Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	2
-	20-0702604	PRO-VERTER RMK (AGS)	2
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	8
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	3
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	8
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	6
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	2
-	20-0002515	PDM 230 VAC	2



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#6.1	1	1500	3	2750	0	600	3	200	1	3000	13350

Config 2



13.5 kW Generator with RsEK (backup)



Cable Case (x2)



PRO-Verter RMK (AGS) (x2)
Mounts to PRO-Verter Faceplate

System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- Site Lighting:** ~200 W each for 12 hours daily
- Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load		PRO-Verter 2 Load	
VLG	3000 W	VLG	2750 W
Road Blockers		1 Road Blockers	2750 W
Spikes		Spikes	
Lighting		Lighting	
1 Guard Shack	3000 W	Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	2
-	20-0702604	PRO-VERTER RMK (AGS)	2
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	17
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	17
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	10
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	2
-	20-0002515	PDM 230 VAC	2



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#7	2	1500	3	2750	0	600	3	200	1	3000	14850

Config 1



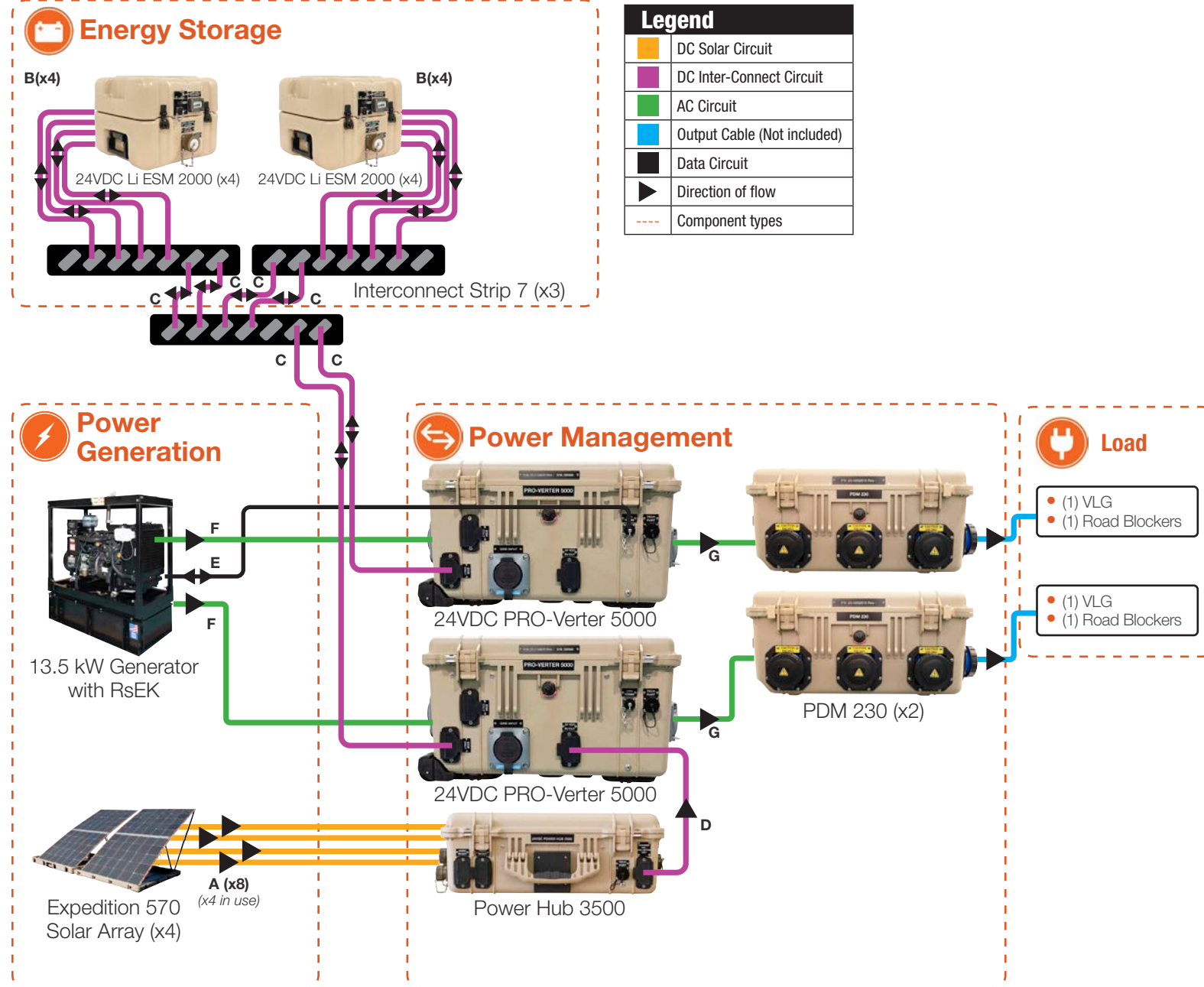
13.5 kW Generator with RsEK (backup)



Cable Case (x2)



PRO-Verter RMK (AGS) (x2)
Mounts to PRO-Verter Faceplate



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- Site Lighting:** ~200 W each for 12 hours daily
- Guard Shack:** ~ 3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

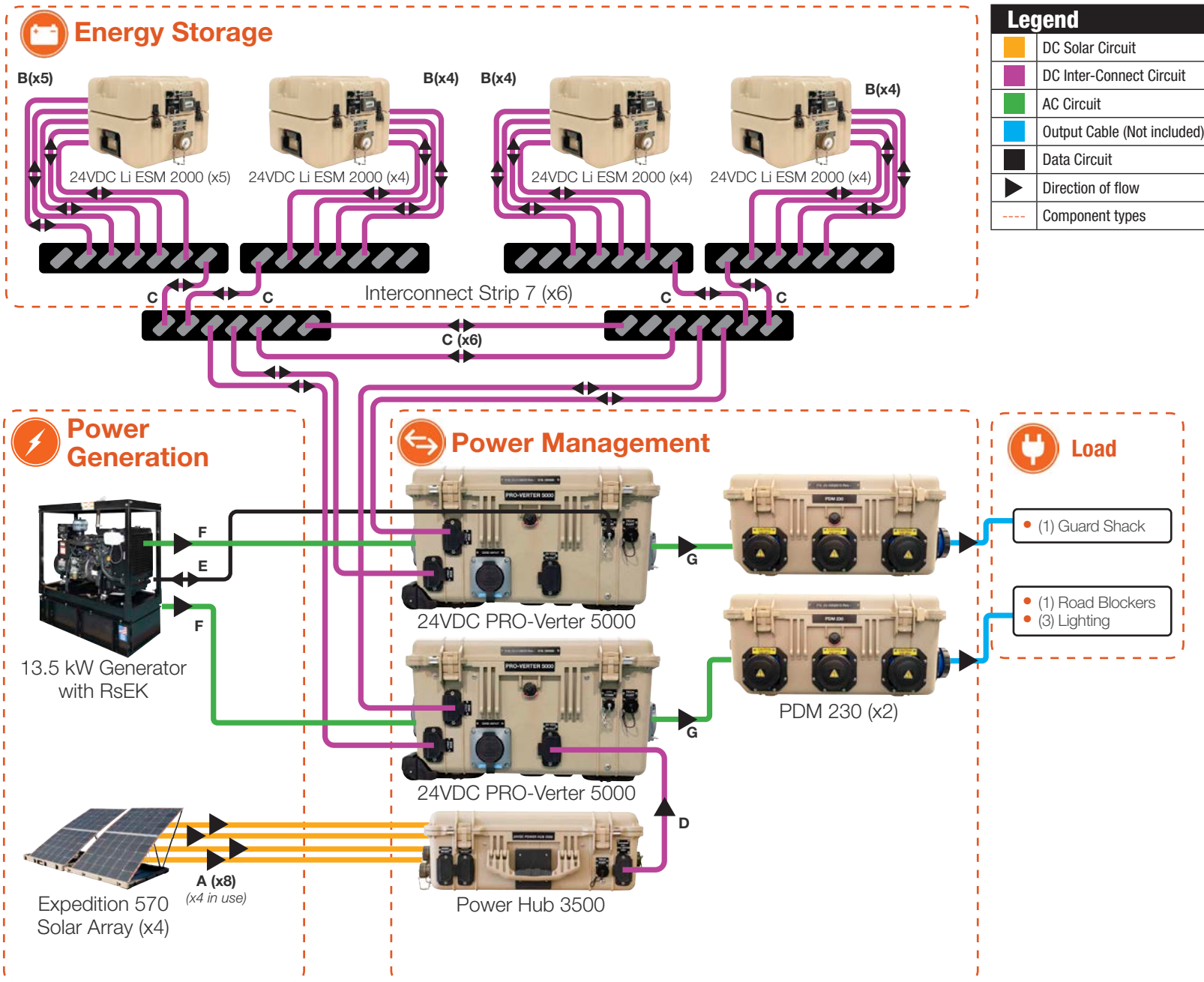
PRO-Verter 1 Load		4250 W	PRO-Verter 2 Load		4250 W
1	VLG	1500 W	1	VLG	1500 W
1	Road Blockers	2750 W	1	Road Blockers	2750 W
	Spikes			Spikes	
	Lighting			Lighting	
	Guard Shack			Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	2
-	20-0702604	PRO-VERTER RMK (AGS)	2
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	8
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	3
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	8
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	6
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	2
-	20-0002515	PDM 230 VAC	2



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#7	2	1500	3	2750	0	600	3	200	1	3000	14850

Config 2



13.5 kW Generator with RsEK (backup)



Cable Case (x2)



PRO-Verter RMK (AGS) (x2)
Mounts to PRO-Verter Faceplate



13.5 kW Generator with RsEK



Expedition 570 Solar Array (x4)



24VDC PRO-Verter 5000



24VDC PRO-Verter 5000



Power Hub 3500



PDM 230 (x2)

System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- **Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- **Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- **Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- **Site Lighting:** ~200 W each for 12 hours daily
- **Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load	Power (W)
VLG	3000 W
Road Blockers	
Spikes	
Lighting	
1 Guard Shack	3000 W

PRO-Verter 2 Load	Power (W)
VLG	3350 W
1 Road Blockers	2750 W
Spikes	
3 Lighting	600 W
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	2
-	20-0702604	PRO-VERTER RMK (AGS)	2
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	17
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	17
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	10
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	2
-	20-0002515	PDM 230 VAC	2



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#4.1	2	1500	3	2750	0	600	4	200	1	3000	15050



13.5 kW Generator with RsEK (backup)

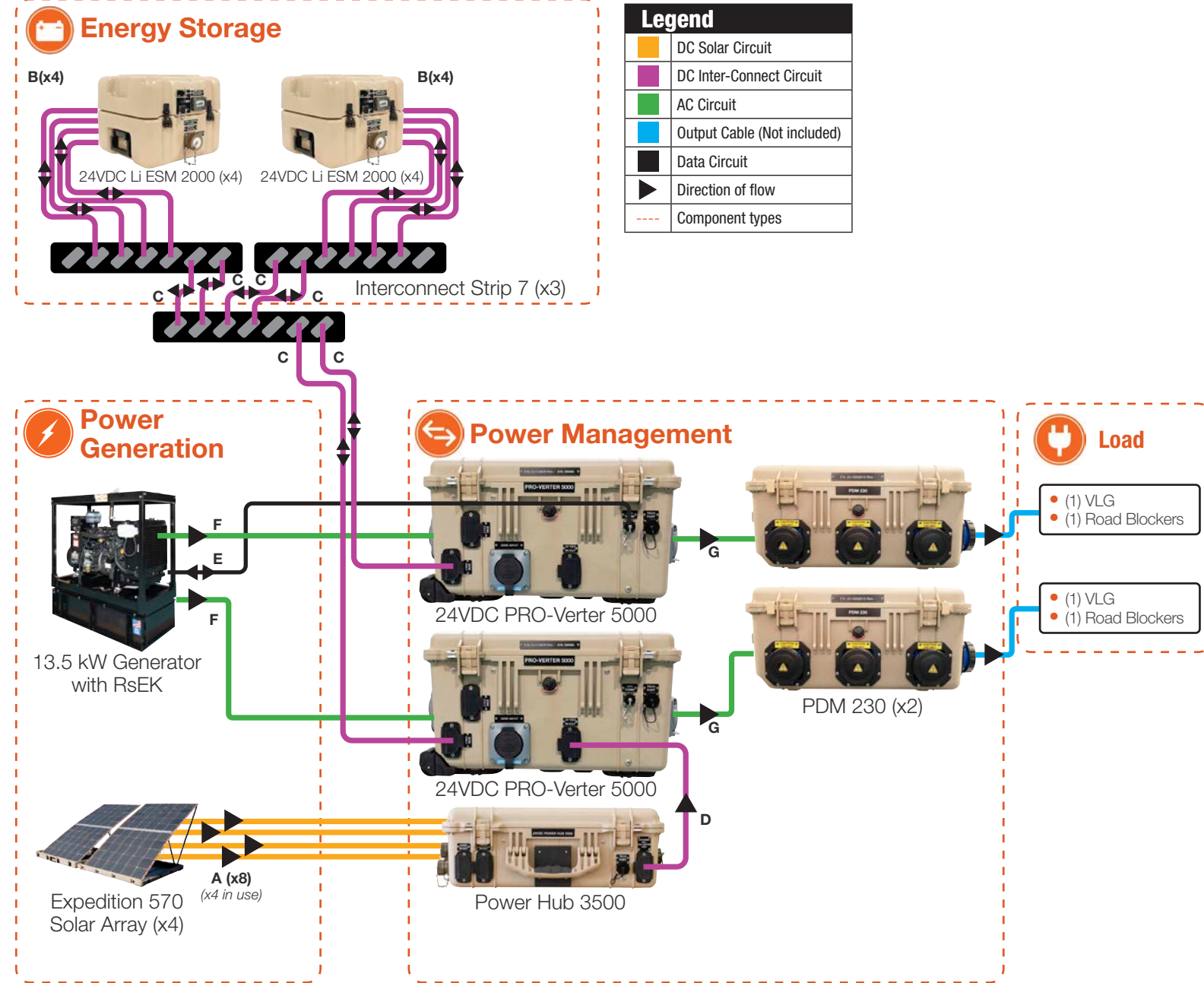


Cable Case (x2)



PRO-Verter RMK (AGS) (x2)
Mounts to PRO-Verter Faceplate

Config 1



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- **Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- **Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- **Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- **Site Lighting:** ~200 W each for 12 hours daily
- **Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

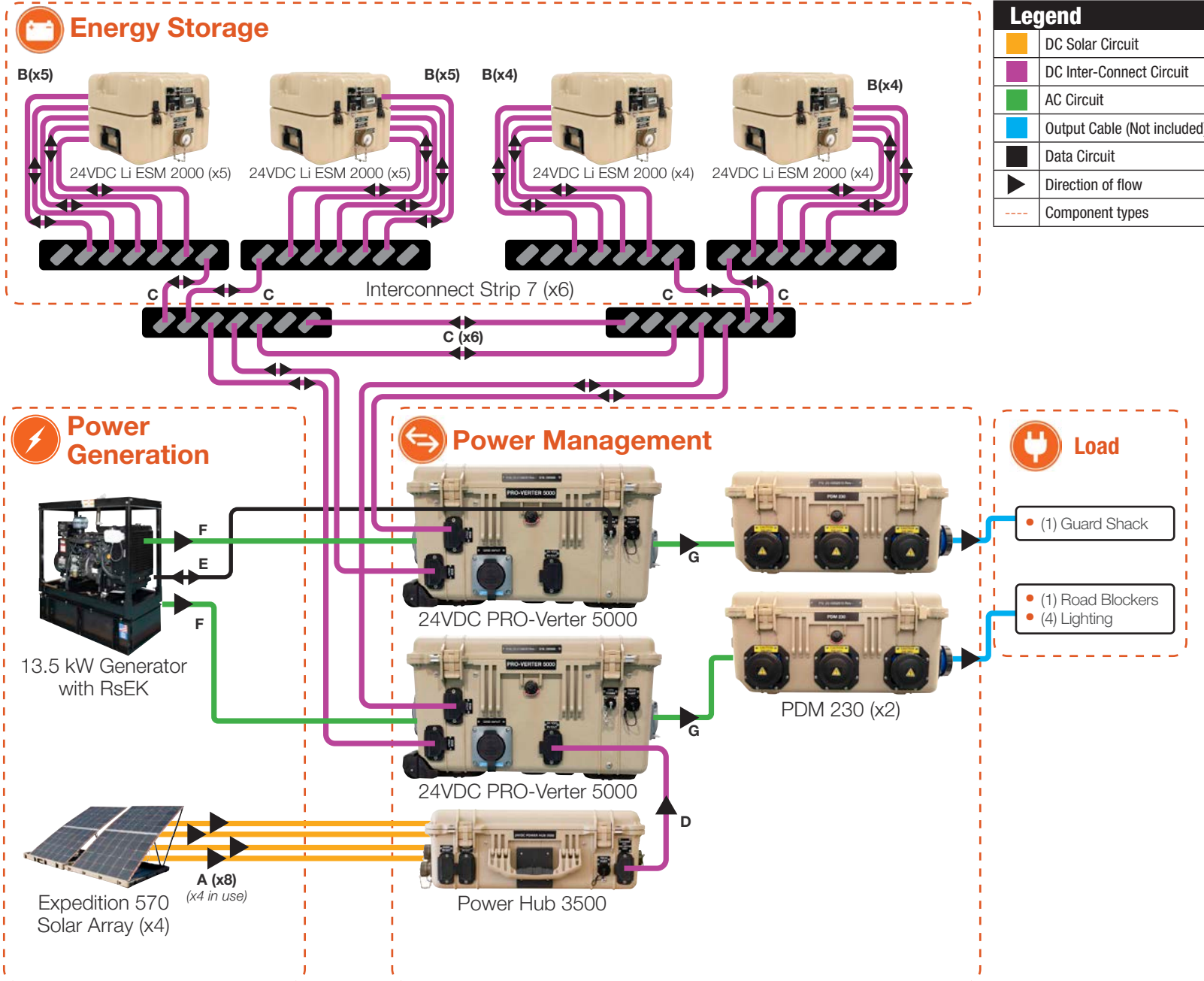
	PRO-Verter 1 Load	4250 W		PRO-Verter 2 Load	4250 W
1	VLG	1500 W	1	VLG	1500 W
1	Road Blockers	2750 W	1	Road Blockers	2750 W
	Spikes			Spikes	
	Lighting			Lighting	
	Guard Shack			Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	2
-	20-0702604	PRO-VERTER RMK (AGS)	2
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	8
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	3
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	8
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	6
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	2
-	20-0002515	PDM 230 VAC	2



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#4.1	2	1500	3	2750	0	600	4	200	1	3000	15050

Config 2



13.5 kW Generator with RsEK (backup)



Cable Case (x2)



PRO-Verter RMK (AGS) (x2)
Mounts to PRO-Verter Faceplate

System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- Site Lighting:** ~200 W each for 12 hours daily
- Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load	3000 W
VLG	
Road Blockers	
Spikes	
Lighting	
1 Guard Shack	3000 W

PRO-Verter 2 Load	3550 W
VLG	
1 Road Blockers	2750 W
Spikes	
4 Lighting	800 W
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	2
-	20-0702604	PRO-VERTER RMK (AGS)	2
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	18
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	18
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	10
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	2
-	20-0002515	PDM 230 VAC	2



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#9.1	2	1500	3	2750	0	600	6	200	1	3000	15450



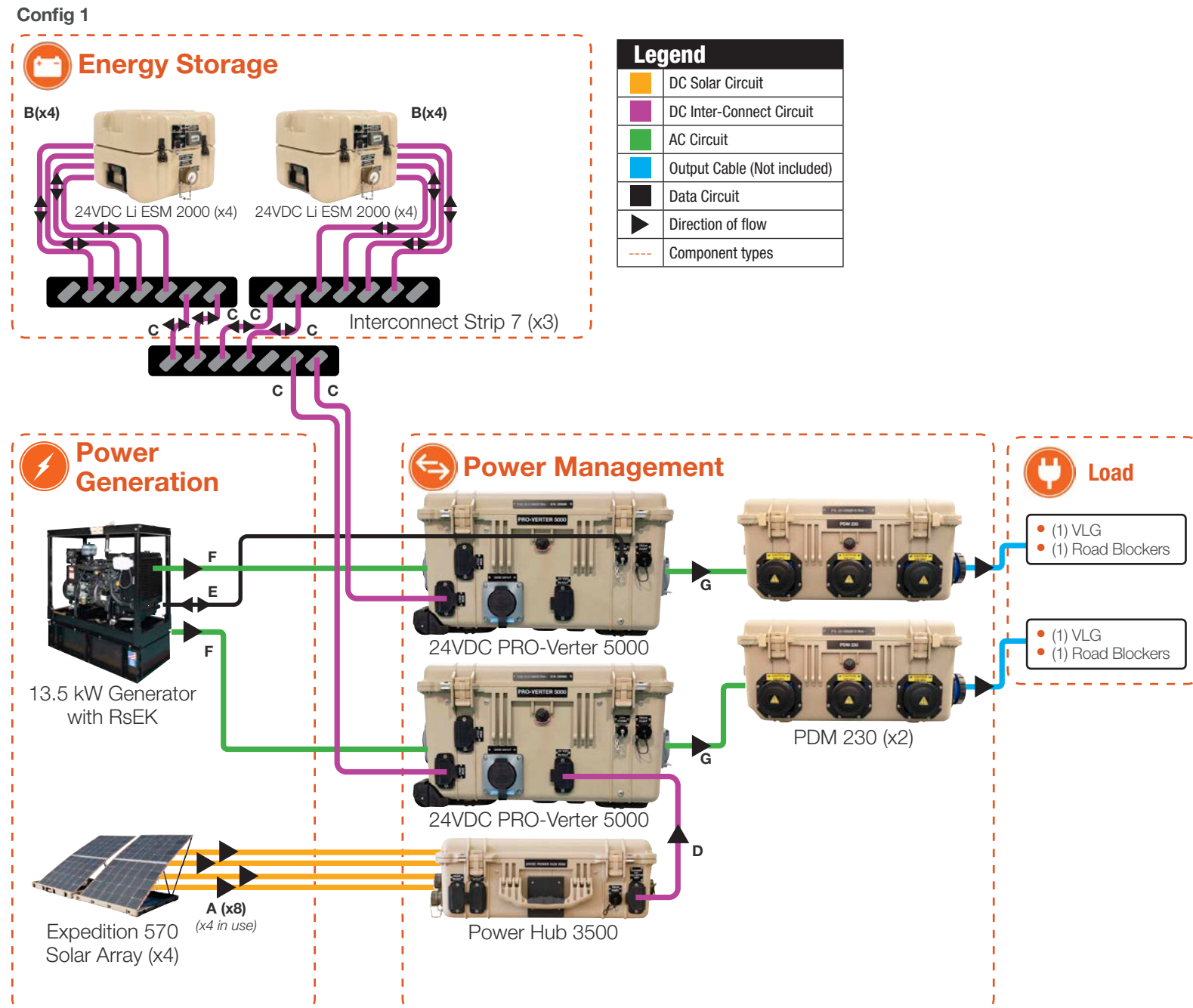
13.5 kW Generator with RsEK (backup)



Cable Case (x2)



PRO-Verter RMK (AGS) (x2)
Mounts to PRO-Verter Faceplate



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- Site Lighting:** ~200 W each for 12 hours daily
- Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load		PRO-Verter 2 Load	
1	VLG	1	VLG
1	Road Blockers	1	Road Blockers
	Spikes		Spikes
	Lighting		Lighting
	Guard Shack		Guard Shack

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	2
-	20-0702604	PRO-VERTER RMK (AGS)	2
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	8
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	3
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	8
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	6
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	2
-	20-0002515	PDM 230 VAC	2



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#9.1	2	1500	3	2750	0	600	6	200	1	3000	15450



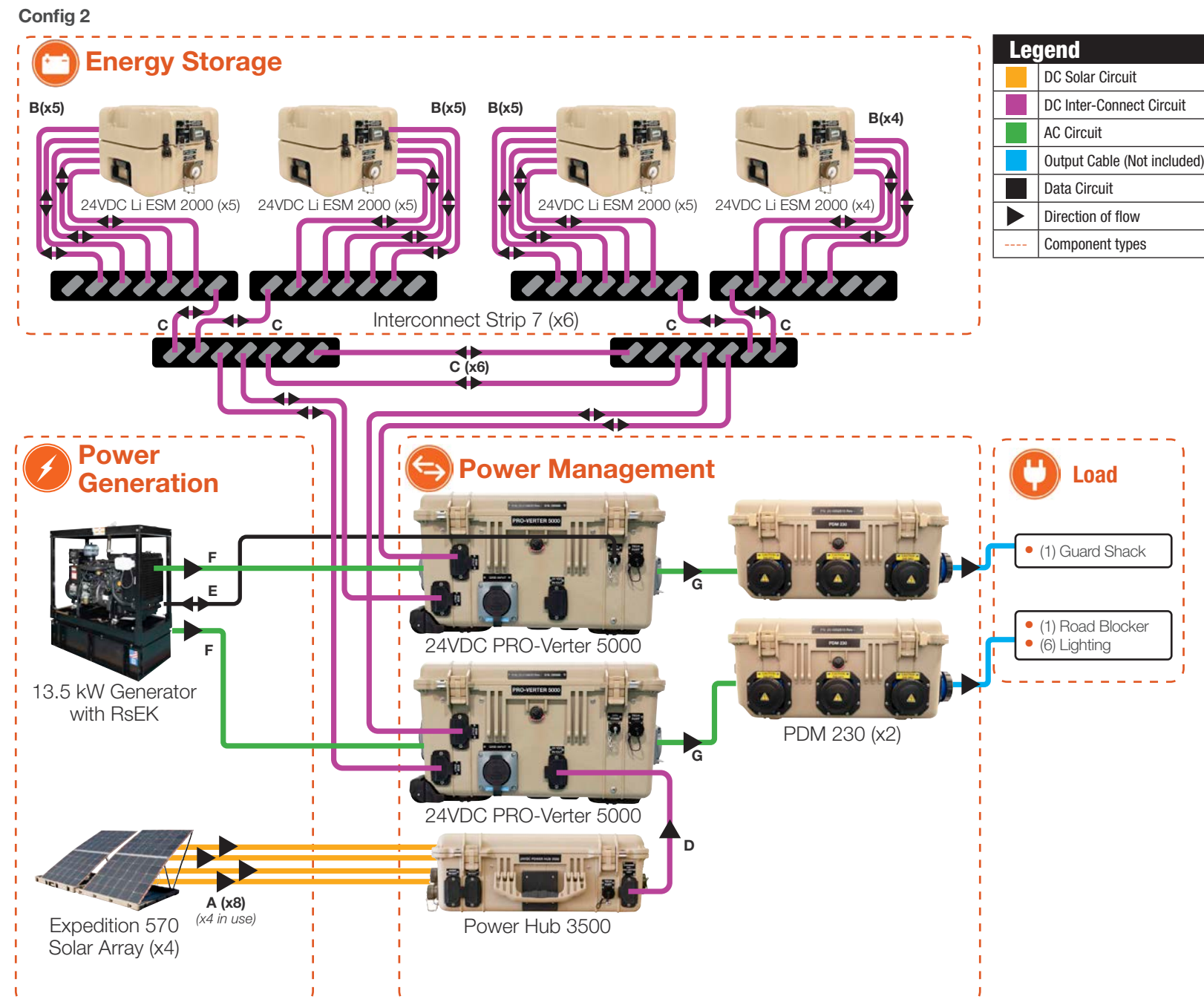
13.5 kW Generator with RsEK (backup)



Cable Case (x2)



PRO-Verter RMK (AGS) (x2)
Mounts to PRO-Verter Faceplate



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- **Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- **Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- **Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- **Site Lighting:** ~200 W each for 12 hours daily
- **Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load	3000 W	PRO-Verter 2 Load	3950 W
VLG		VLG	
Road Blockers		1 Road Blockers	2750 W
Spikes		Spikes	
Lighting		6 Lighting	1200 W
1 Guard Shack	3000 W	Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	2
-	20-0702604	PRO-VERTER RMK (AGS)	2
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	19
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	19
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	10
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	2
-	20-0002515	PDM 230 VAC	2



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#1	2	1500	3	2750	2	600	4	200	1	3000	16250



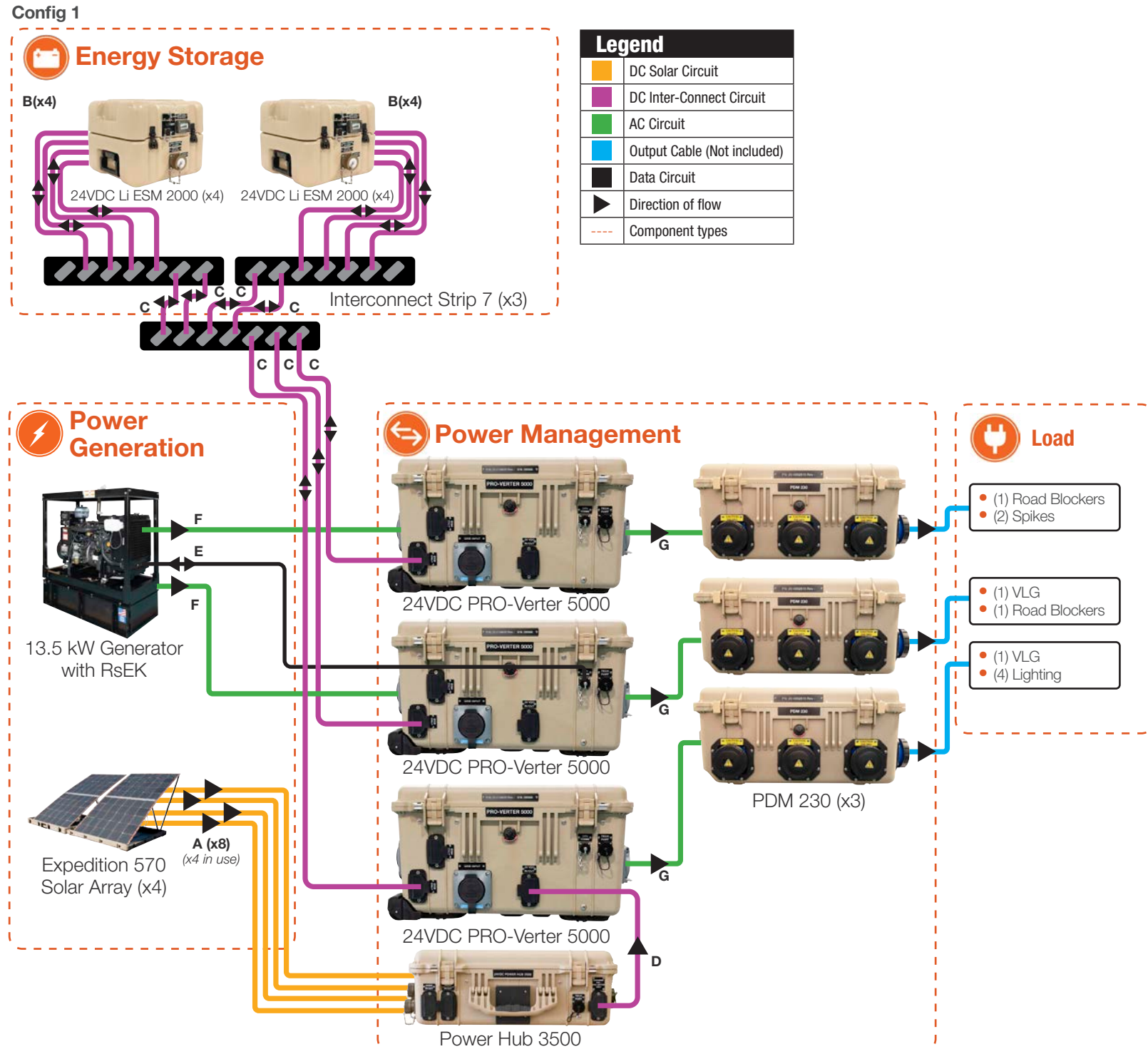
13.5 kW Generator with RsEK (backup)



Cable Case (x2)



PRO-Verter RMK (AGS) (x3)
Mounts to PRO-Verter Faceplate



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- Site Lighting:** ~200 W each for 12 hours daily
- Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load		PRO-Verter 2 Load	
VLG	3950 W	VLG	4250 W
1 Road Blockers	2750 W	1 Road Blockers	2750 W
2 Spikes	1200 W	Spikes	
Lighting		Lighting	
Guard Shack		Guard Shack	

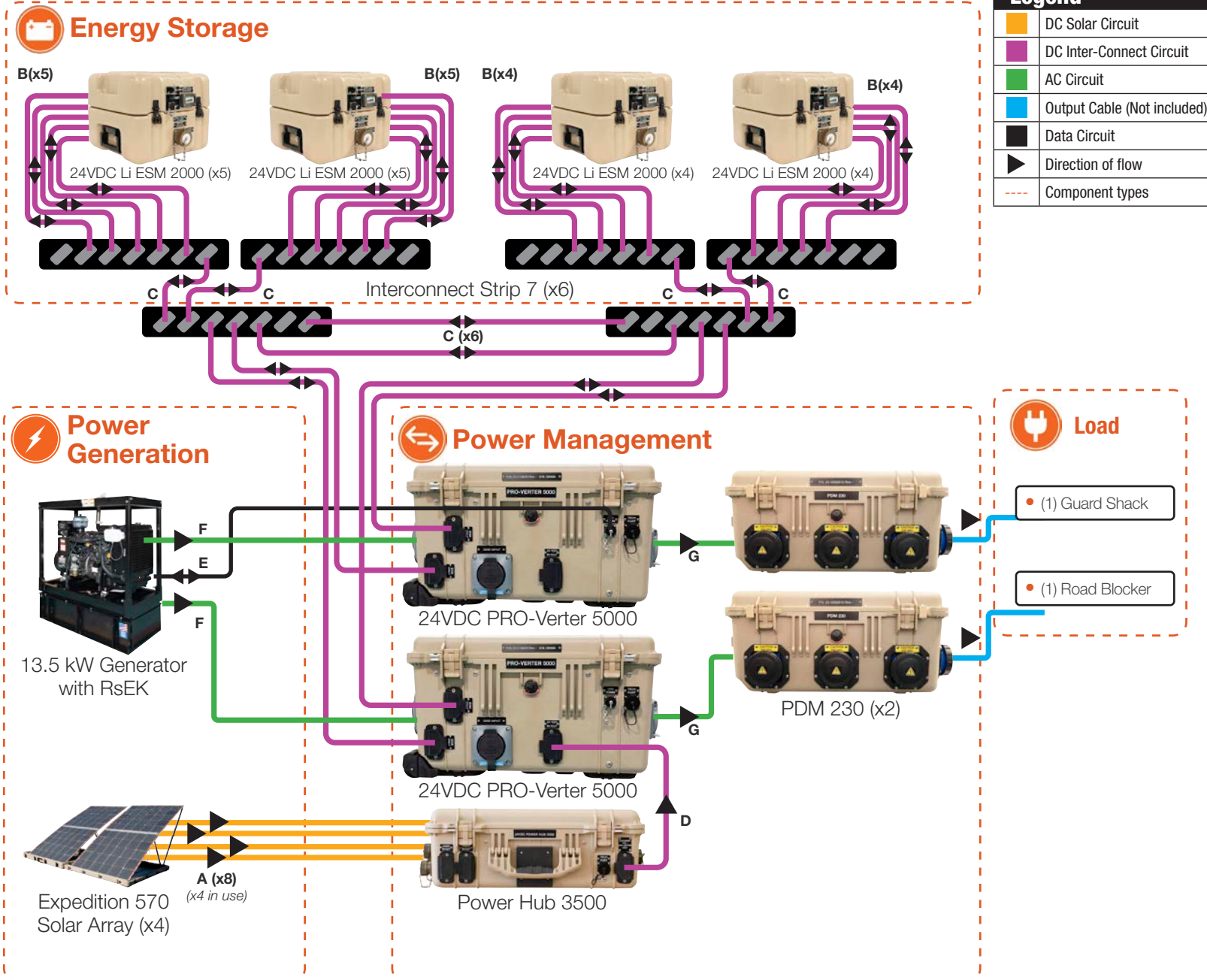
PRO-Verter 3 Load	
1 VLG	2300 W
Road Blockers	1500 W
Spikes	
4 Lighting	800 W
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	3
-	20-0702604	PRO-VERTER RMK (AGS)	3
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	8
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	3
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	8
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	7
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	3
-	20-0002515	PDM 230 VAC	3



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#1	2	1500	3	2750	2	600	4	200	1	3000	16250

Config 2



13.5 kW Generator with RsEK (backup)



Cable Case (x2)



PRO-Verter RMK (AGS) (x2)
Mounts to PRO-Verter Faceplate

System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- Site Lighting:** ~200 W each for 12 hours daily
- Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load	3000 W
VLG	
Road Blockers	
Spikes	
Lighting	
1 Guard Shack	3000 W

PRO-Verter 2 Load	2750 W
VLG	
1 Road Blockers	2750 W
Spikes	
Lighting	
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	2
-	20-0702604	PRO-VERTER RMK (AGS)	2
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	18
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	18
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	10
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	2
-	20-0002515	PDM 230 VAC	2



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#8	4	1500	3	2750	3	600	3	200	1	3000	19650



13.5 kW Generator with RsEK (backup)

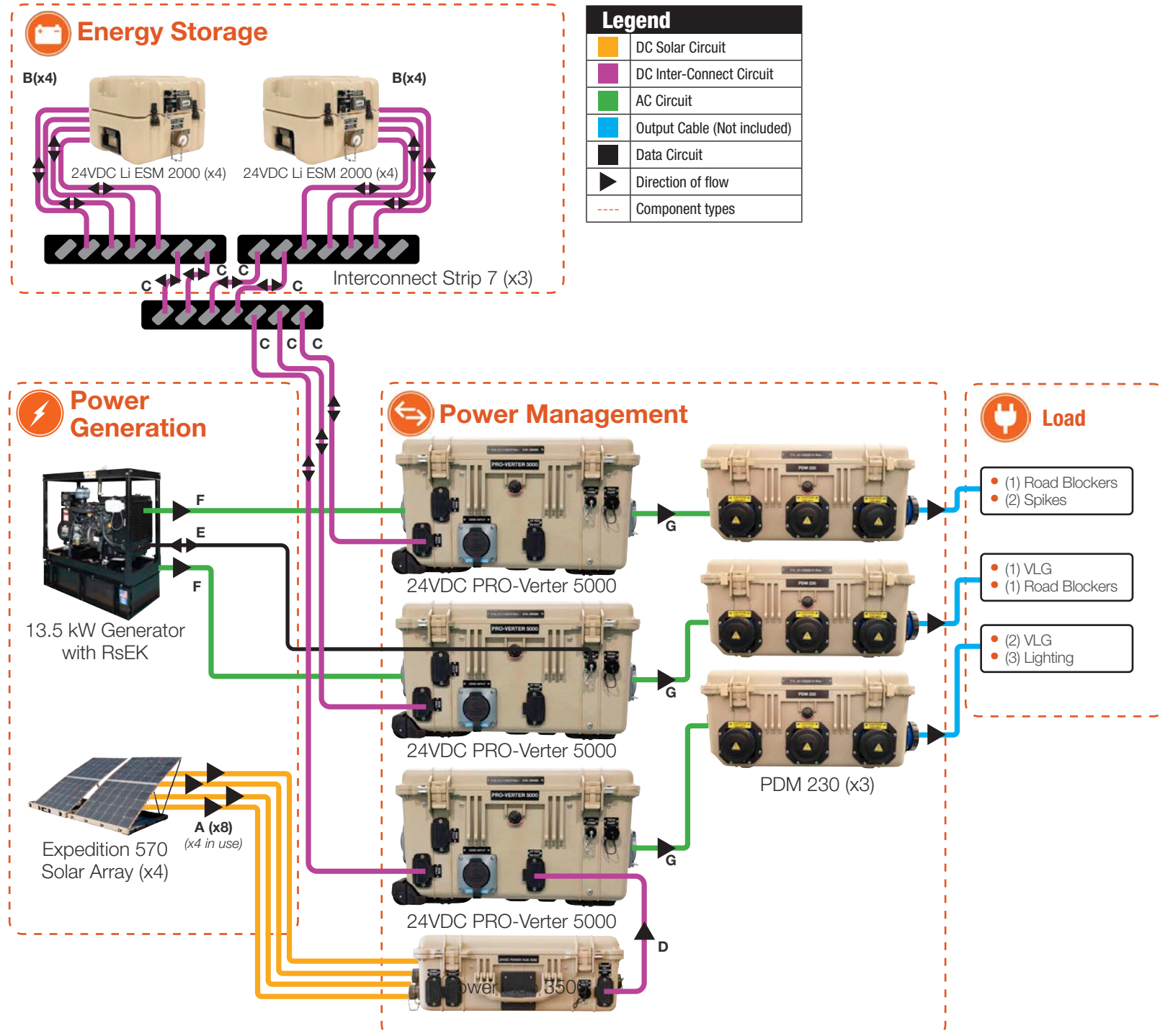


Cable Case (x2)



PRO-Verter RMK (AGS) (x3)
Mounts to PRO-Verter Faceplate

Config 1



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- **Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- **Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- **Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- **Site Lighting:** ~200 W each for 12 hours daily
- **Guard Shack:** ~ 3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load		PRO-Verter 2 Load	
VLG	3950 W	1 VLG	1500 W
1 Road Blockers	2750 W	1 Road Blockers	2750 W
2 Spikes	1200 W	Spikes	
Lighting		Lighting	
Guard Shack		Guard Shack	

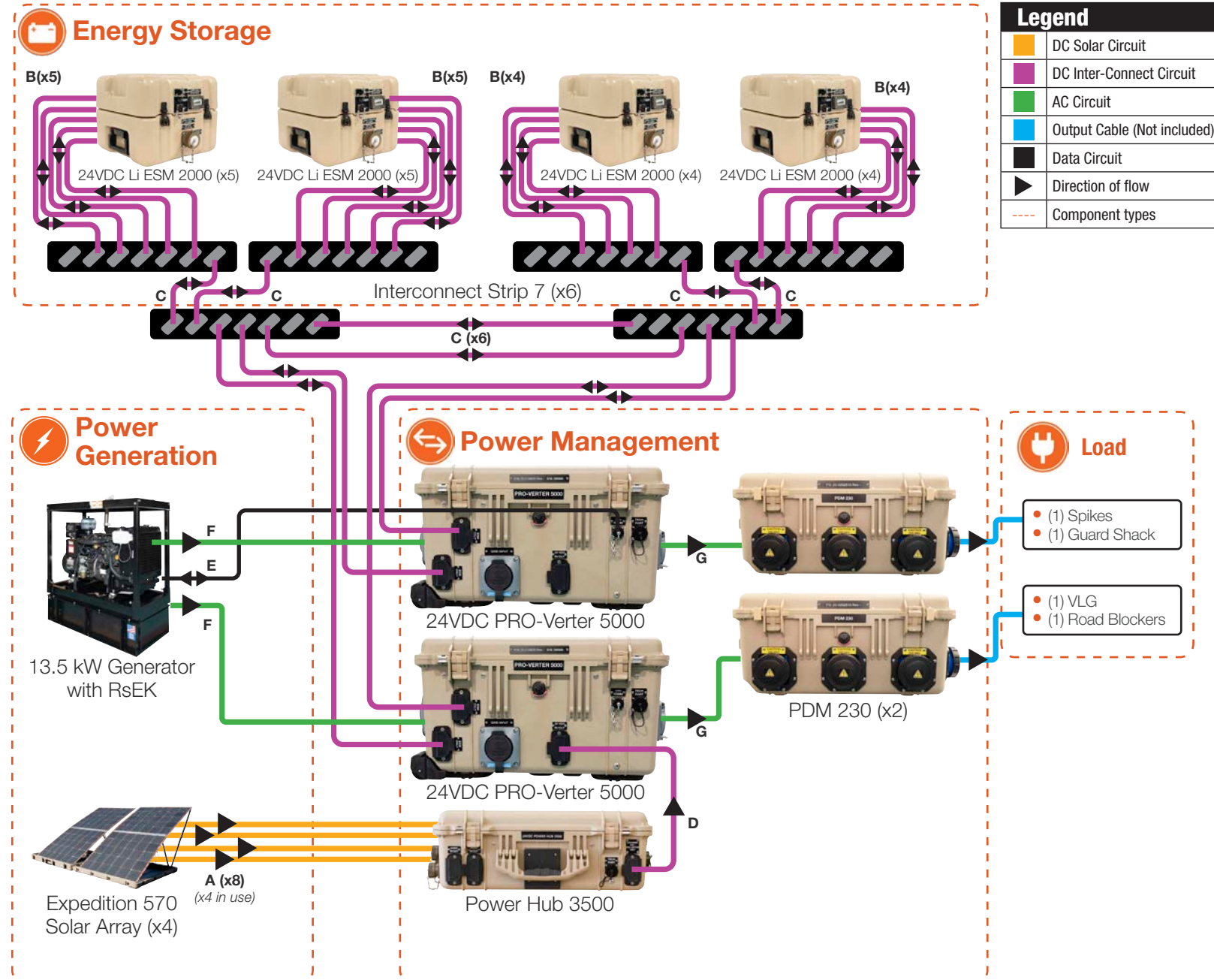
PRO-Verter 3 Load	
2 VLG	3600 W
2 VLG	3000 W
Road Blockers	
Spikes	
3 Lighting	600 W
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	3
-	20-0702604	PRO-VERTER RMK (AGS)	3
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	8
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	3
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	8
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	7
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	3
-	20-0002515	PDM 230 VAC	3



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#8	4	1500	3	2750	3	600	3	200	1	3000	19650

Config 2



13.5 kW Generator with RsEK (backup)

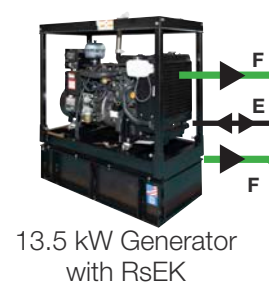


Cable Case (x2)



PRO-Verter RMK (AGS) (x2)
Mounts to PRO-Verter Faceplate

Power Generation



13.5 kW Generator with RsEK



Expedition 570 Solar Array (x4)

Power Management



24VDC PRO-Verter 5000

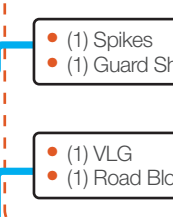


24VDC PRO-Verter 5000



Power Hub 3500

Load



(1) Spikes
(1) Guard Shack
(1) VLG
(1) Road Blockers

System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- Site Lighting:** ~200 W each for 12 hours daily
- Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load	3600 W
VLG	
Road Blockers	
1 Spikes	600 W
Lighting	
1 Guard Shack	3000 W

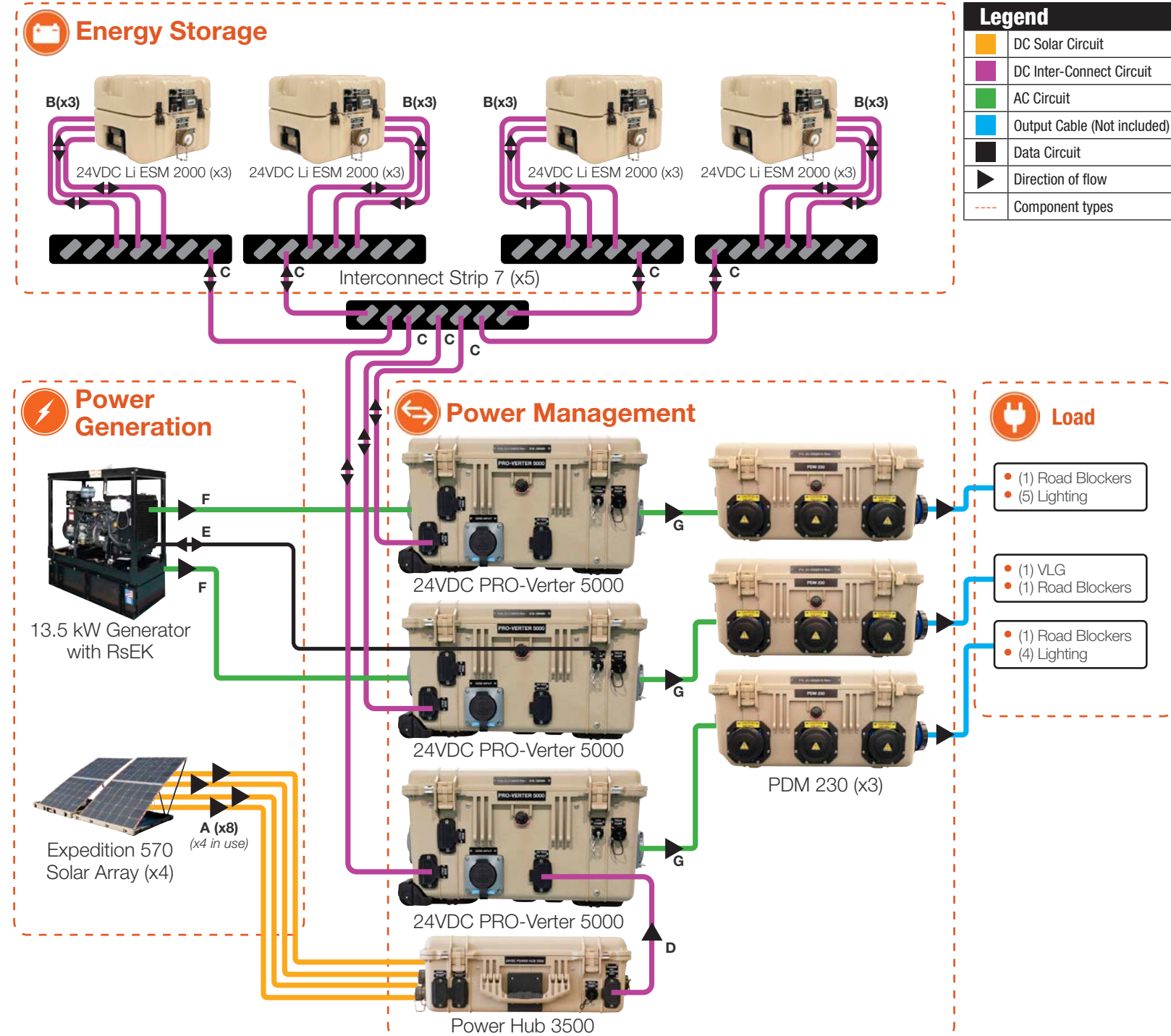
PRO-Verter 2 Load	4250 W
1 VLG	1500 W
1 Road Blockers	2750 W
Spikes	
Lighting	
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	2
-	20-0702604	PRO-VERTER RMK (AGS)	2
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	18
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	18
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	10
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	2
-	20-0002515	PDM 230 VAC	2



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#5	2	1500	6	2750	2	600	9	200	1	3000	22750

Config 1



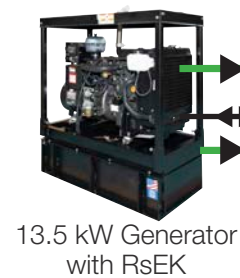
13.5 kW Generator with RsEK (backup)



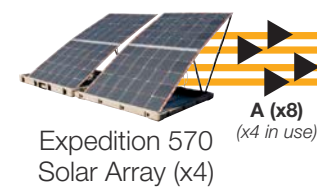
Cable Case (x2)



PRO-Verter RMK (AGS) (x3)
Mounts to PRO-Verter Faceplate



13.5 kW Generator with RsEK



Expedition 570 Solar Array (x4)
(x4 in use)

System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- Site Lighting:** ~200 W each for 12 hours daily
- Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load		PRO-Verter 2 Load	
VLG	3750 W	1 VLG	1500 W
1 Road Blockers	2750 W	1 Road Blockers	2750 W
Spikes		Spikes	
5 Lighting	1000 W	Lighting	
Guard Shack		Guard Shack	

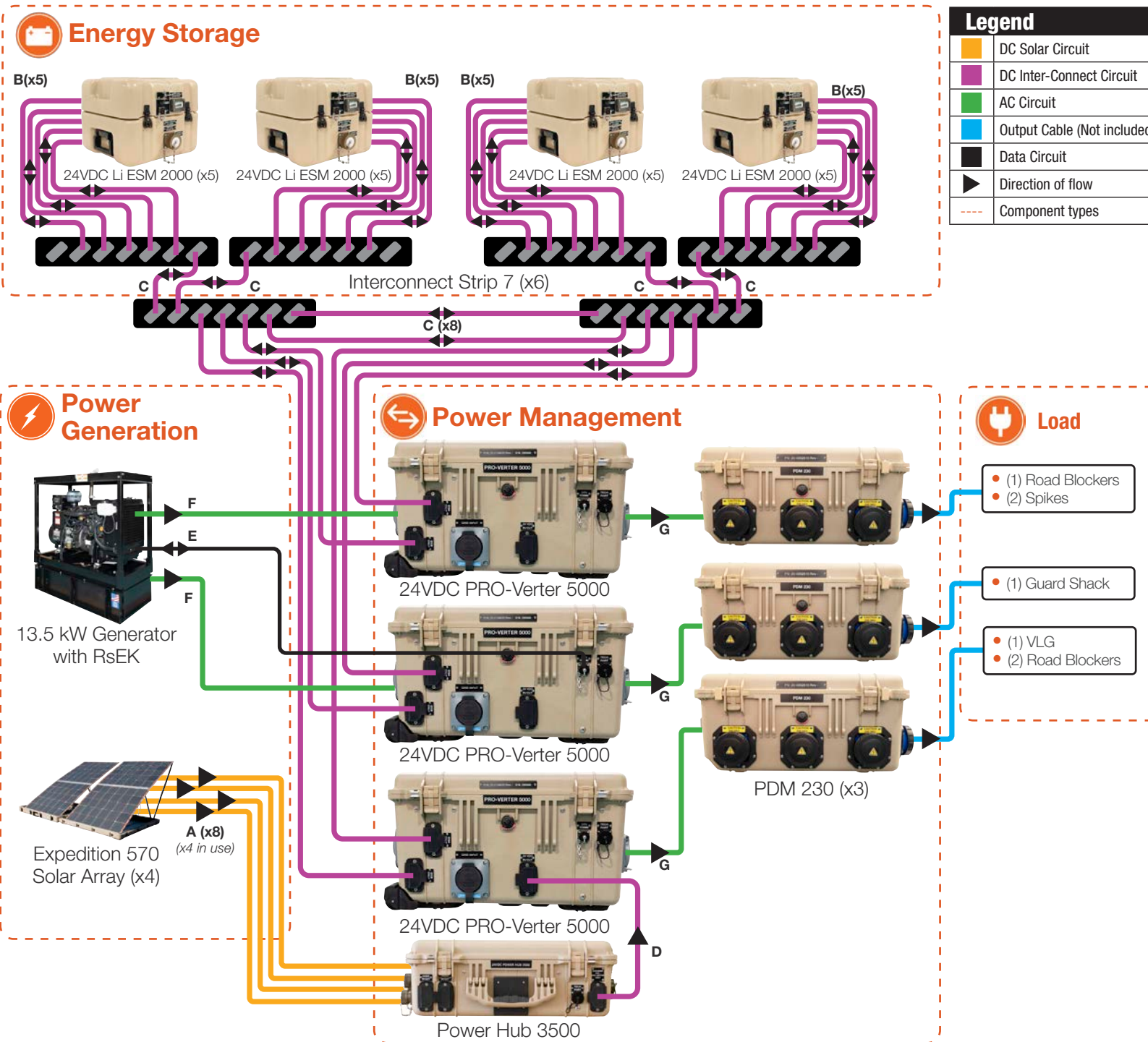
PRO-Verter 3 Load	
VLG	3550 W
1 Road Blockers	2750 W
Spikes	
4 Lighting	800 W
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	3
-	20-0702604	PRO-VERTER RMK (AGS)	3
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	12
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	5
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	12
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	7
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	3
-	20-0002515	PDM 230 VAC	3



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#5	2	1500	6	2750	2	600	9	200	1	3000	22750

Config 2



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- **Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- **Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- **Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- **Site Lighting:** ~200 W each for 12 hours daily
- **Guard Shack:** ~ 3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
 RMK capability included in PRO-Verter.

PRO-Verter 1 Load		PRO-Verter 2 Load	
VLG	3950 W	VLG	3000 W
1 Road Blockers	2750 W	Road Blockers	
2 Spikes	1200 W	Spikes	
Lighting		Lighting	
Guard Shack		1 Guard Shack	3000 W

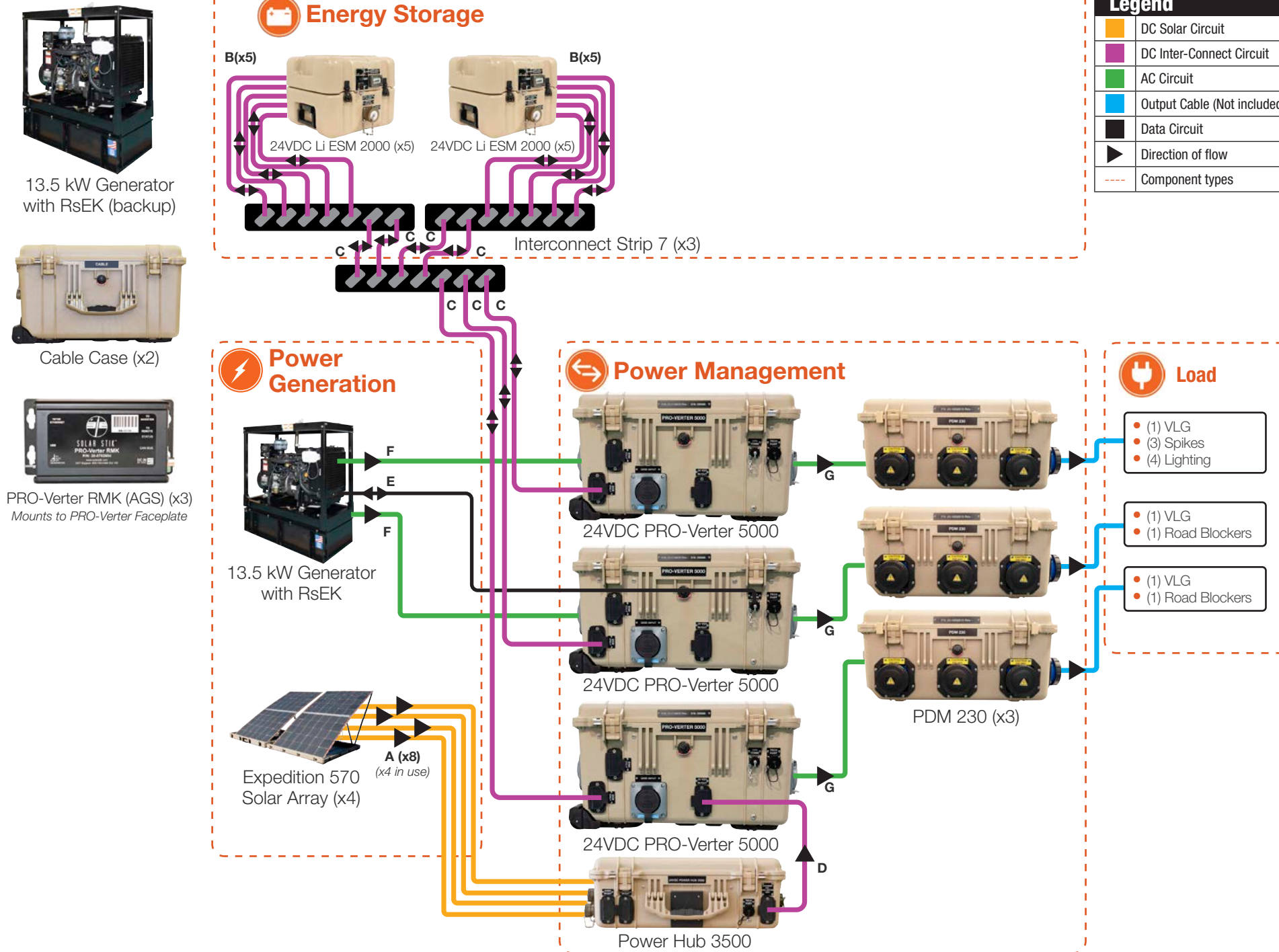
PRO-Verter 3 Load	
1 VLG	4250 W
2 Road Blockers	1500 W
Spikes	2750 W
Lighting	
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	3
-	20-0702604	PRO-VERTER RMK (AGS)	3
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	20
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	20
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	12
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	3
-	20-0002515	PDM 230 VAC	3



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#10	6	1500	3	2750	3	600	9	200	1	3000	23850

Config 1



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- **Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- **Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- **Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- **Site Lighting:** ~200 W each for 12 hours daily
- **Guard Shack:** ~ 3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
 RMK capability included in PRO-Verter.

PRO-Verter 1 Load		PRO-Verter 2 Load	
1 VLG	4100 W	1 VLG	4250 W
Road Blockers	1500 W	1 Road Blockers	2750 W
3 Spikes	1800 W	Spikes	
4 Lighting	800 W	Lighting	
Guard Shack		Guard Shack	

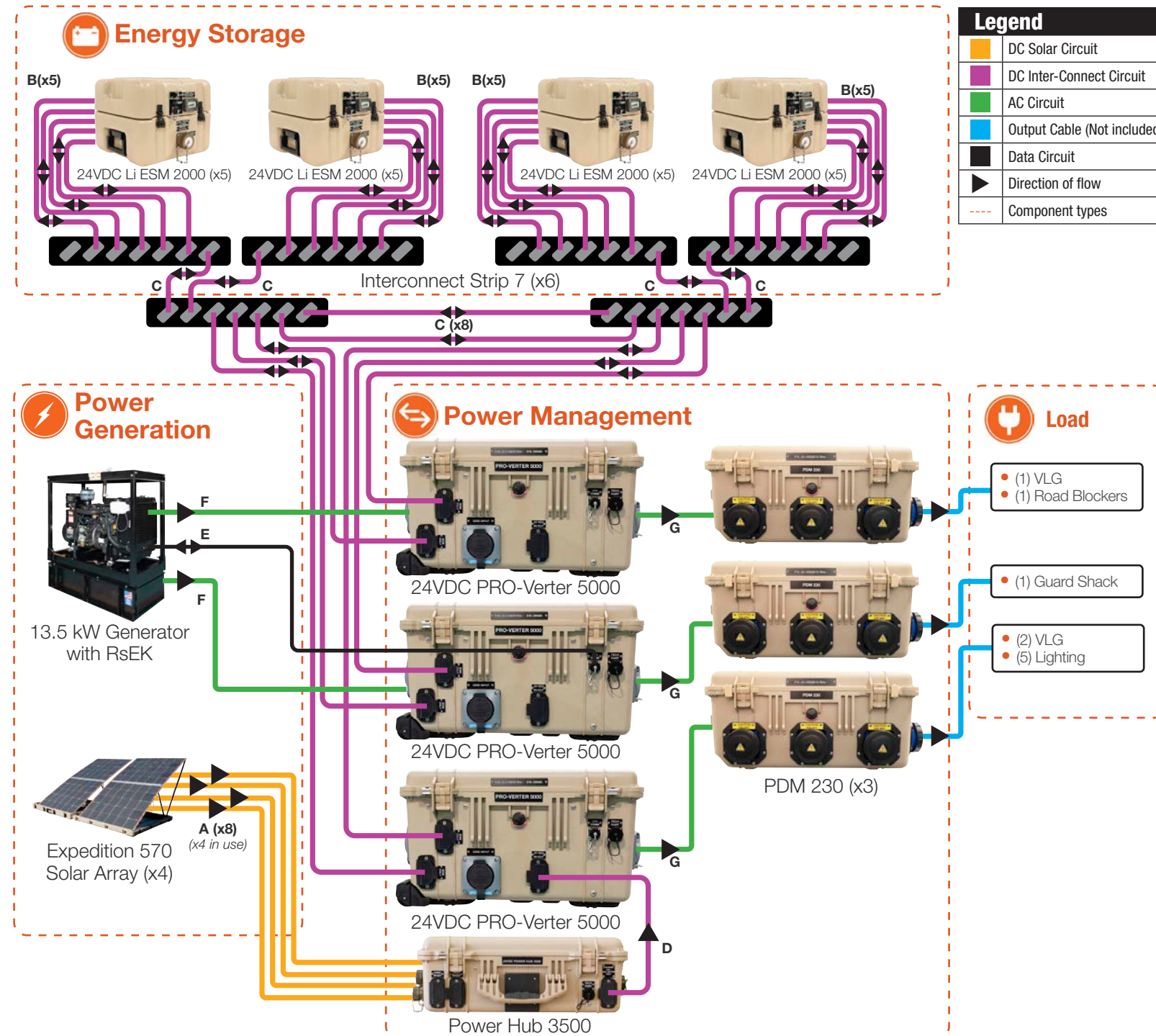
PRO-Verter 3 Load	
1 VLG	4250 W
1 Road Blockers	2750 W
Spikes	
Lighting	
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	3
-	20-0702604	PRO-VERTER RMK (AGS)	3
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	10
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	3
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	10
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	7
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	3
-	20-0002515	PDM 230 VAC	3



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#10	6	1500	3	2750	3	600	9	200	1	3000	23850

Config 2



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- **Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- **Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- **Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- **Site Lighting:** ~200 W each for 12 hours daily
- **Guard Shack:** ~ 3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
 RMK capability included in PRO-Verter.

PRO-Verter 1 Load		PRO-Verter 2 Load	
1	VLG	4250 W	1500 W
1	Road Blockers	3000 W	2750 W
	Spikes		
	Lighting		
	Guard Shack		

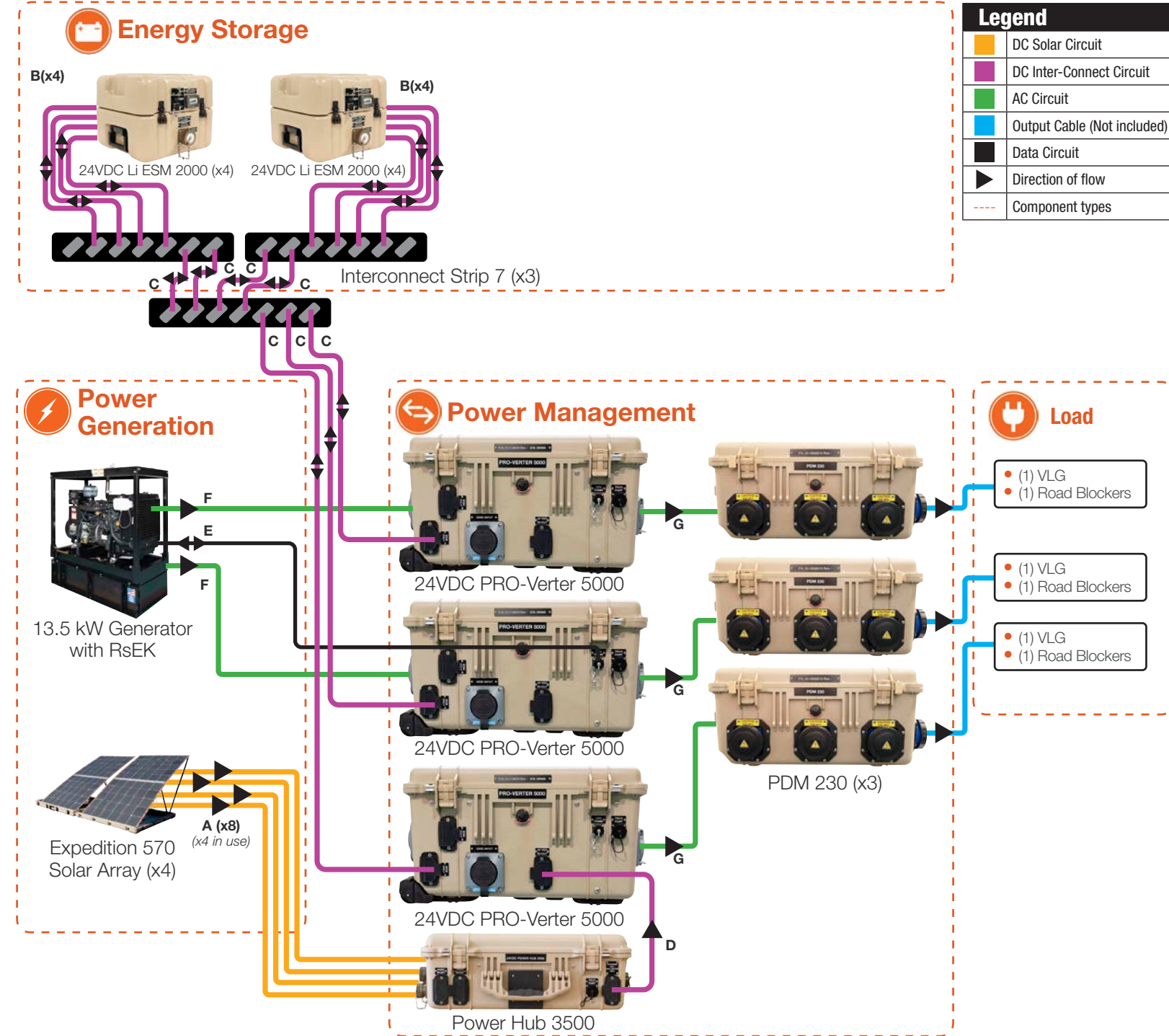
PRO-Verter 3 Load	
2	VLG
	Road Blockers
	Spikes
5	Lighting
	Guard Shack

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	3
-	20-0702604	PRO-VERTER RMK (AGS)	3
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	20
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	20
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	12
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	3
-	20-0002515	PDM 230 VAC	3



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#2	6	1500	5	2750	5	600	6	200	1	3000	29950

Config 1



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- **Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- **Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- **Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- **Site Lighting:** ~200 W each for 12 hours daily
- **Guard Shack:** ~ 3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
 RMK capability included in PRO-Verter.

PRO-Verter 1 Load		PRO-Verter 2 Load	
1	VLG	1	VLG
1	Road Blockers	1	Road Blockers
	Spikes		Spikes
	Lighting		Lighting
	Guard Shack		Guard Shack

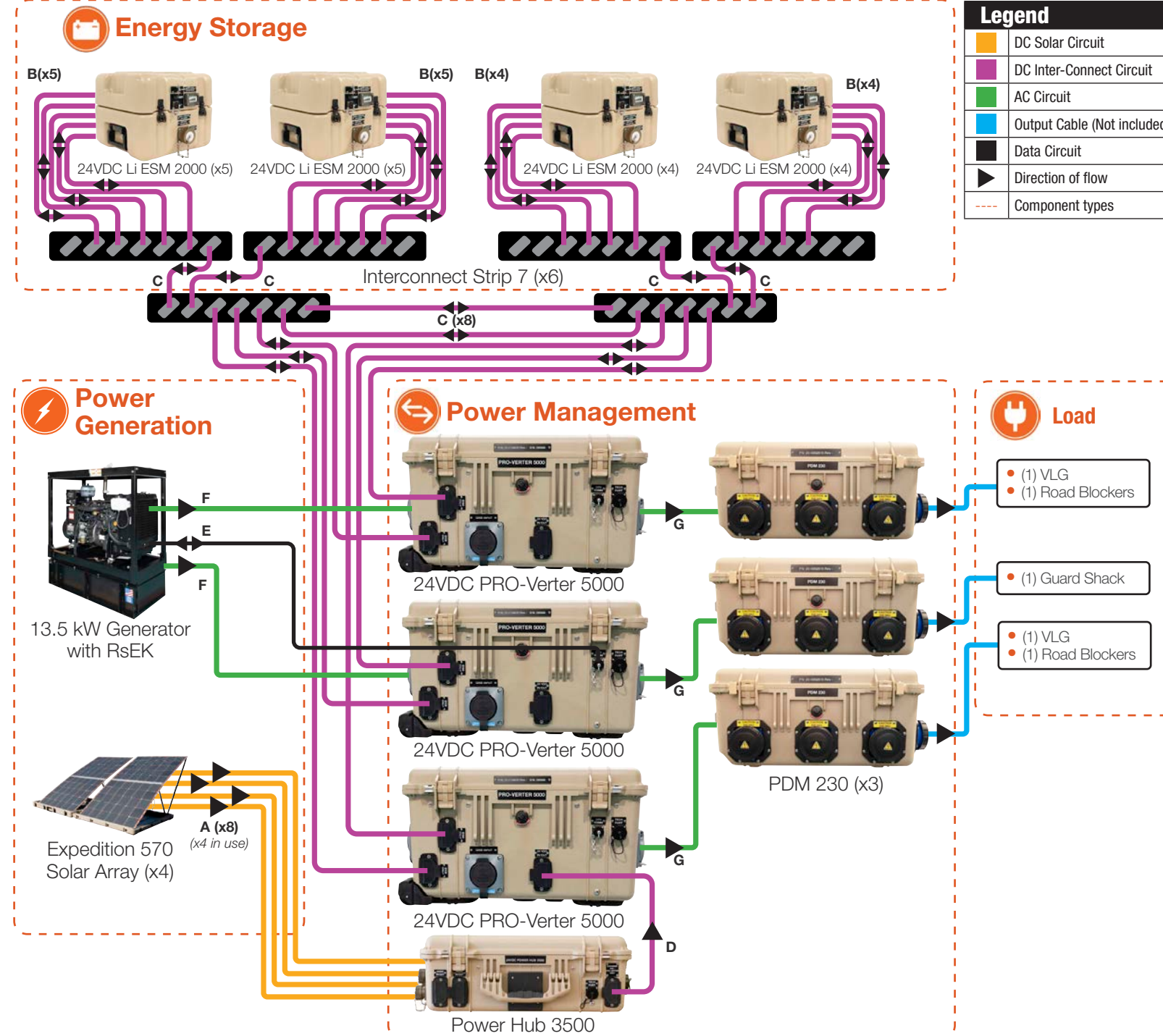
PRO-Verter 3 Load	
1	VLG
1	Road Blockers
	Spikes
	Lighting
	Guard Shack

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	3
-	20-0702604	PRO-VERTER RMK (AGS)	3
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	8
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	3
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	8
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	7
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	3
-	20-0002515	PDM 230 VAC	3



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#2	6	1500	5	2750	5	600	6	200	1	3000	29950

Config 2



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- **Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- **Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- **Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- **Site Lighting:** ~200 W each for 12 hours daily
- **Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load		PRO-Verter 2 Load	
1 VLG	1500 W	VLG	
1 Road Blockers	2750 W	Road Blockers	
Spikes		Spikes	
Lighting		Lighting	
Guard Shack		1 Guard Shack	3000 W

PRO-Verter 3 Load	
1 VLG	1500 W
1 Road Blockers	2750 W
Spikes	
Lighting	
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	3
-	20-0702604	PRO-VERTER RMK (AGS)	3
-	20-0302206	24VDC POWER HUB 3500	1
-	21-0202317	24VDC Li ESM 2000	18
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RSEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RSEK (BACKUP)	1
-	11-1000045	EXPEDITION 570 SOLAR ARRAY	4
A	16-0800102	24VDC PAM SOLAR LEASH 30'	8
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	2
-	13-1000160	24VDC INTERCONNECT STRIP 7	6
B	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	18
C	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	12
D	13-1000246	24VDC 20FT PRO-VERTER TO POWER HUB INTERCONNECT CABLE (2AWG)	1
E	13-1000155	15' GENERATOR COMMS CABLE	1
F	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
G	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	3
-	20-0002515	PDM 230 VAC	3



Gate	VLG Qty	Power Required (W)	Road Blockers Qty	Power Required (W)	Spike Qty	Power Required (W)	Site Lighting Qty	Power Required (W)	Guard Shack Qty	Power Required (W)	Total Power Per Gate (W)
G#2	6	1500	5	2750	5	600	6	200	1	3000	29950



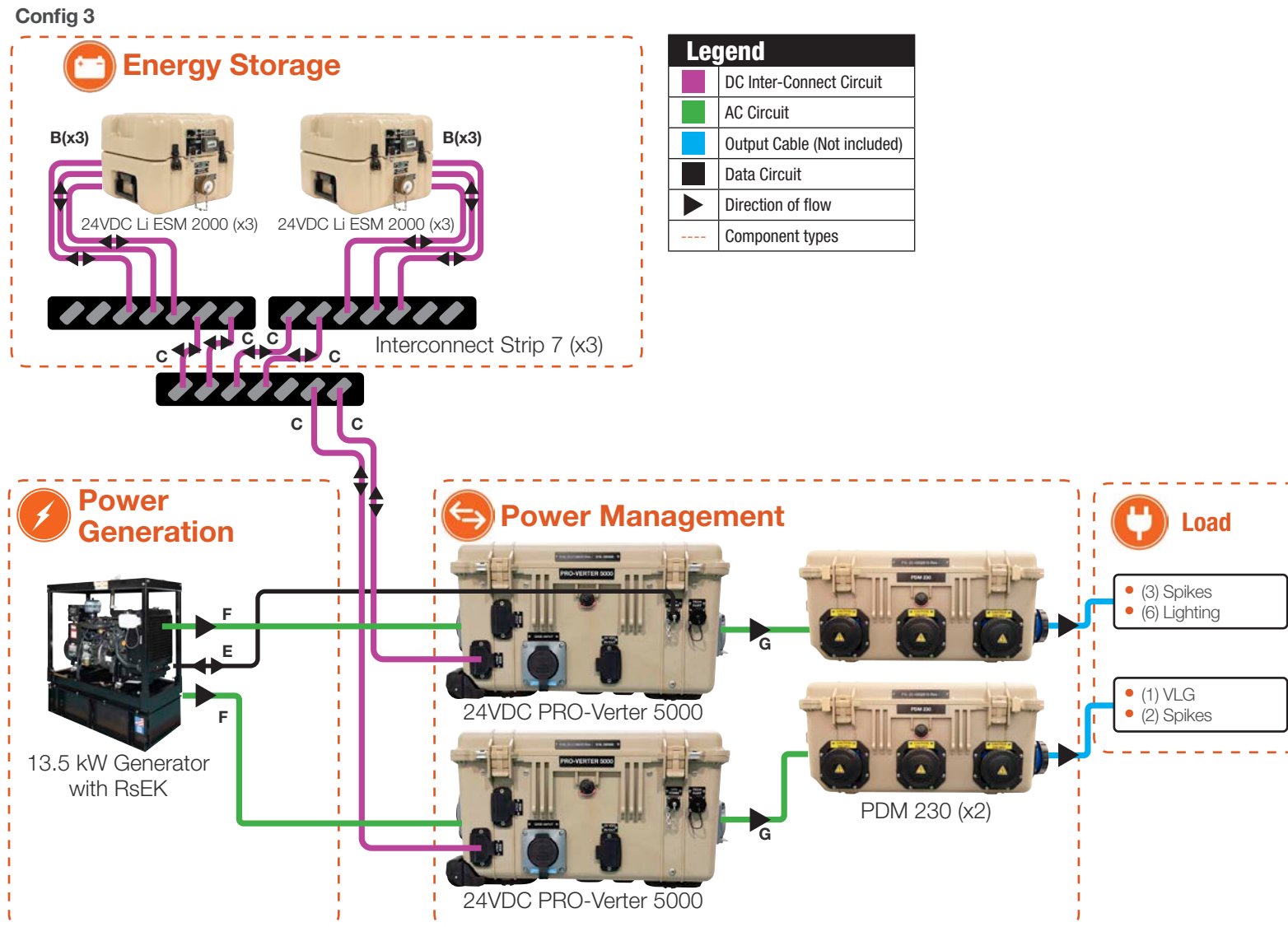
13.5 kW Generator with RsEK (backup)



Cable Case



PRO-Verter RMK (AGS) (x2)
Mounts to PRO-Verter Faceplate



System sized to handle following loads.

System will cycle 1-2 times daily, the recommended amount for lengthened lifespan of a Hybrid System.

Load (W)

- Gate Draw:** ~1,500 W each, 50 times per hour (once every 72 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 1 hour total daily)
- Road Blocker:** ~2,750 W each, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 7 seconds each time (about 2 hours total daily)
- Spikes:** ~600 W each for 6 hours daily, 100 times an hour (once every 36 seconds) from 7:00 a.m. to 5:00 p.m. for 2 seconds each time (about 30 minutes total daily)
- Site Lighting:** ~200 W each for 12 hours daily
- Guard Shack:** ~3000 W 24/7

PDMs each include (5) IEC60309, 32 Amp, 230 VAC, 50 Hz connections.
RMK capability included in PRO-Verter.

PRO-Verter 1 Load	3000 W
VLG	
Road Blockers	
3 Spikes	1800 W
6 Lighting	1200 W
Guard Shack	

PRO-Verter 2 Load	2700 W
1 VLG	1500 W
Road Blockers	
2 Spikes	1200 W
Lighting	
Guard Shack	

Cable	Item #	Description	System Qty
-	20-0104033	24VDC PRO-VERTER 5000-220 AGS AFF1	2
-	20-0702604	PRO-VERTER RMK (AGS)	2
-	21-0202317	24VDC Li ESM 2000	6
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK	1
-	19-0401005	13 kW 230V 50Hz GENERATOR WITH RsEK (BACKUP)	1
-	14-1000053	CABLE CASE, GATE POWER SYSTEM	1
-	13-1000160	24VDC INTERCONNECT STRIP 7	3
A	13-1000294	CABLE, POWER, INTERCONNECT/AIB6FA32-5PC, 24VDC, 2AWG	6
B	13-0000047	24VDC 10' INTERCONNECT CABLE (2AWG)	6
C	13-1000155	15' GENERATOR COMMS CABLE	1
D	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (INPUT)	2
E	13-1000248	AC POWER CABLE, 15FT 230V 50Hz HBL2621SW TO HBL2623SW (OUTPUT)	2
-	20-0002515	PDM 230 VAC	2

