

Product Description

The VPS Series remote power kits are designed for applications where power is not available on-site. Compatible with the complete KBC wireless range, the kits include pole-mount solar panel/s, a lockable, NEMA 4X-IP65 rated enclosure with pole-mount, PWM or MPPT charge controller with breakers, terminal blocks, DIN rail and cabling. Everything required to generate power is wired and ready to connect to batteries.

The solar panels have a 20-25 year power output guarantee and come with a specific pole-mount bracket that can be affixed to a 51mm-152mm / 2"-6" diameter pole depending on the model.

Optional accessories to enable conversion and different output voltages and a 12/24V battery array are available separately. The optional fan for the VPS3 series is recommended for kits in zones 0-2.

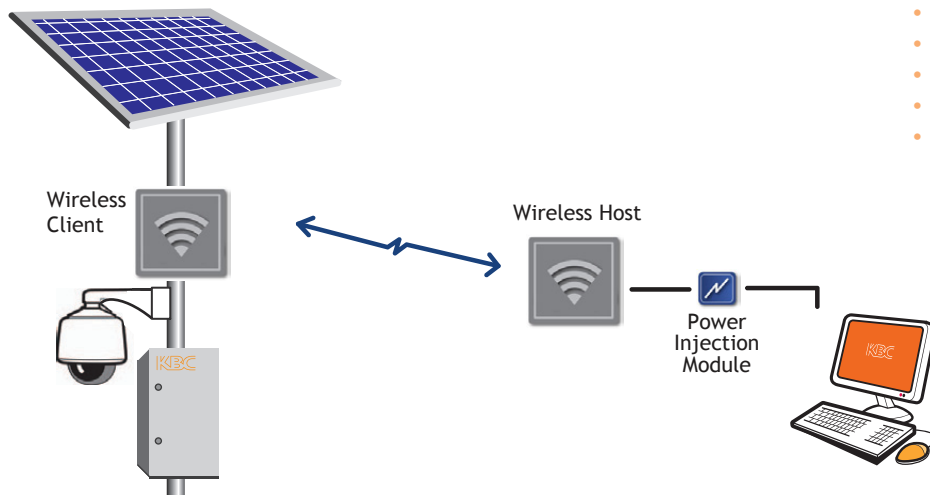


Product Features

- Turnkey power solution - simply mount and connect to battery
- 24 hours of continuous power with up to 7 days of stored backup power
- Weatherproof & UV resistant, powder coated aluminium & steel enclosures
- Accessory options for different voltages & outputs (PoE, terminal, etc.)
- Pole or wall-mounted (mounts included)
- Optional high performance sealed lead acid batteries
- Advanced charge controls to protect against over-charge/discharge
- 20-25 year power output guarantee



Typical System Configuration



Applications

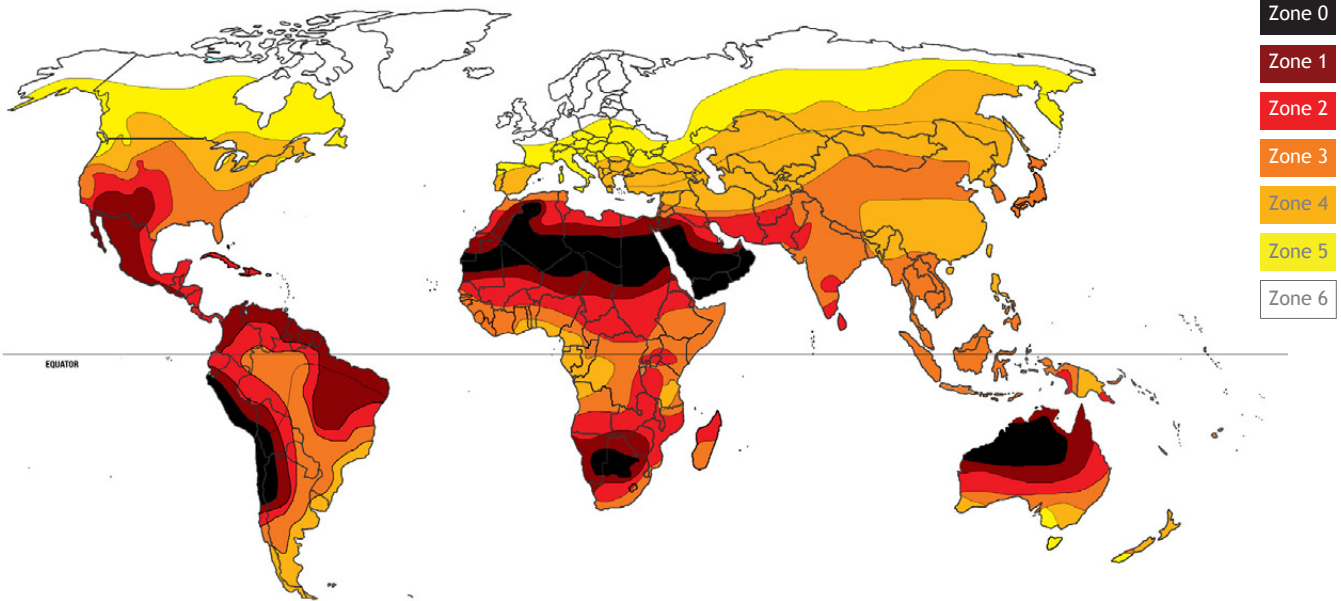
- Perimeter / intrusion detection
- Surveillance & access control
- Electric fences, gates & barriers
- Remote wireless transmission
- Traffic, highway & railway sensors
- Petrochemical sites

Kit Selection

Step 1: Determine the load power required

Step 2: From the map below, determine which zone the equipment will be in

Step 3: Refer to the color-coded table below with the determined zone and load in Watts to select the appropriate kit



The map shows average peak sun hours for the year. If equipment is required to run only from late spring to early fall (autumn), please jump ahead up to 2 Zones to calculate output. E.g in the USA, Zone 3 with a requirement for power only from May - September, then use Zone 1 in the chart below.

This product is currently available in North America and Latin America.

Part Numbers

Below is a selection of the most popular kits. If you can't find what you need, or for equipment in Zones 0 & 6, please contact us.

Part Number	Solar Array (Watts)	Battery Voltage (Vdc)	Battery Space Available (Ah)	Enclosure	Load in Watts 24hr Continuous Watts Available to Use					
					Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Powder Coated Steel										
KBC-VPS1-100W-12	100	12	100	406 x 356 x 203mm / 16 x14 x 8"	14	12.5	9.5	6.5	3.5	
KBC-VPS1-160W-12	160	12	100	406 x 356 x 203mm / 16 x14 x 8"	20	18	14	10	5	
KBC-VPS1-200W-12	200	12	100	406 x 356 x 203mm / 16 x14 x 8"	27	25	19	13	7	
KBC-VPS1-200W-24	200	24	100 (2 x 50)	406 x 356 x 203mm / 16 x14 x 8"	27	25	19	13	7	
KBC-VPS1-250W-12	250	12	100	406 x 356 x 203mm / 16 x14 x 8"	35	30	22	15	8	
KBC-VPS1-250W-24	250	24	100 (2 x 50)	406 x 356 x 203mm / 16 x14 x 8"	35	30	22	15	8	
KBC-VPS1-300W-12	300	12	100	406 x 356 x 203mm / 16 x14 x 8"	45	35	27	18	10	
KBC-VPS1-300W-24	500	24	100 (2 x 50)	406 x 356 x 203mm / 16 x14 x 8"	45	35	27	18	10	
Powder Coated Aluminum										
KBC-VPS3-100W-12	100	12	2 x 150	610 x 457 x 381mm / 24 x 18 x 15"	14	12.5	9.5	6.5	3.5	
KBC-VPS3-160W-12	160	12	2 x 150	610 x 457 x 381mm / 24 x 18 x 15"	20	18	14	10	5	
KBC-VPS3-200W-12	200	12	2 x 150	610 x 457 x 381mm / 24 x 18 x 15"	27	25	19	13	7	
KBC-VPS3-200W-24	200	24	2 x 150	610 x 457 x 381mm / 24 x 18 x 15"	27	25	19	13	7	
KBC-VPS3-250W-12	245	12	2 x 150	610 x 457 x 381mm / 24 x 18 x 15"	35	30	22	15	8	
KBC-VPS3-250W-24	245	24	2 x 150	610 x 457 x 381mm / 24 x 18 x 15"	35	30	22	15	8	
KBC-VPS3-300W-12	300	12	2 x 150	610 x 457 x 381mm / 24 x 18 x 15"	45	35	27	18	10	
KBC-VPS3-300W-24	300	24	2 x 150	610 x 457 x 381mm / 24 x 18 x 15"	45	35	27	18	10	
KBC-VPS3-500W-24	500	12	2 x 150	610 x 457 x 381mm / 24 x 18 x 15"	70	60	44	30	16	
KBC-VPS3-600W-24	600	24	2 x 150	610 x 457 x 381mm / 24 x 18 x 15"	90	70	54	36	20	
KBC-VPS3-900W-24TP	900	24	2 x 150	610 x 457 x 381mm / 24 x 18 x 15"	130	105	81	54	30	

Part Number	Solar Array (Watts)	Battery Voltage (Vdc)	Battery Space Available (Ah)	Enclosure Rugged Aluminum	Load in Watts 24hr Continuous Watts Available to Use				
					Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
KBC-VPS5-100W-12	100	12	2 x 250	762 x 610 x 356mm / 30 x 24 x 14"	14	12.5	9.5	6.5	3.5
KBC-VPS5-160W-12	160	12	2 x 250	762 x 610 x 356mm / 30 x 24 x 14"	20	18	14	10	5
KBC-VPS5-200W-12	200	12	2 x 250	762 x 610 x 356mm / 30 x 24 x 14"	27	25	19	13	7
KBC-VPS5-200W-24	200	24	2 x 250	762 x 610 x 356mm / 30 x 24 x 14"	27	25	19	13	7
KBC-VPS5-250W-12	245	12	2 x 250	762 x 610 x 356mm / 30 x 24 x 14"	35	30	22	15	8
KBC-VPS5-250W-24	245	24	2 x 250	762 x 610 x 356mm / 30 x 24 x 14"	35	30	22	15	8
KBC-VPS5-300W-12	300	12	2 x 250	762 x 610 x 356mm / 30 x 24 x 14"	45	35	27	18	10
KBC-VPS5-300W-24	300	24	2 x 250	762 x 610 x 356mm / 30 x 24 x 14"	45	35	27	18	10
KBC-VPS5-500W-24	500	24	2 x 250	762 x 610 x 356mm / 30 x 24 x 14"	70	60	44	30	16
KBC-VPS5-600W-24	600	24	2 x 250	762 x 610 x 356mm / 30 x 24 x 14"	90	70	54	36	20
KBC-VPS5-900W-24TP	900	24	2 x 250	762 x 610 x 356mm / 30 x 24 x 14"	130	105	81	54	30
KBC-VPS5-1200W-24TP	1200	24	2 x 250	762 x 610 x 356mm / 30 x 24 x 14"	180	140	108	72	40

Specifications

VPS1 Series

Kits include a powder coated steel enclosure with pole mount, solar panel/s, advanced charge controller and power assembly with all necessary breakers, terminal blocks, DIN rail and cabling. Different output voltage options (24, 48 & 56Vdc PoE converters / injectors are available separately and can be connected into the power assembly blocks. Enclosure has space for 1 x 100Ah battery for 12Vdc or 2 x 50Ah batteries for 24Vdc systems (batteries & pole not included).

KBC-VPS1-



Power

Max continuous power (W)

Zone 1	14	20	27	27	35	35	45	45
Zone 2	12.5	18	25	25	30	30	35	35
Zone 3	9.5	14	19	19	22	22	27	27
Zone 4	6.5	10	13	13	15	15	18	18
Zone 5	3.5	5	7	7	8	8	10	10

Solar panel power (W)	1 x 100	1 x 160	2 x 100	2 x 100	1 x 245+	1 x 245+	2 x 160	2 x 160
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Electrical

Voltage output	12Vdc 10A	12Vdc 10A	12Vdc 10A	24Vdc 10A	12Vdc 10A	24Vdc 10A	12Vdc 10A	24Vdc 10A
Battery capacity	100Ah	100Ah	100Ah	2 x 50Ah	100Ah	2 x 50Ah	100Ah	2 x 50Ah
Battery voltage (Vdc)	12	12	12	24	12	24	12	24

Battery type required Sealed lead acid / Absorbent Glass Mat (AGM)

Charge controller Advanced + power assembly | Advanced MPPT + power controller

Mechanical

Solar pole mount Side of pole Side of pole 2 x Side of pole 2 x Side of pole Side of pole Side of pole Side of pole Side of pole

Recommended Pole Size (metal pole or larger wooden utility pole) 76.2-152.4mm / 3-6"

Enclosure Size (int.) 400 x 356 x 203mm / 15.75 x 14 x 8"

Enclosure Size (ext.) 406 x 356 x 203mm / 16 x 14 x 8"

Extra Space in Enclosure 76 x 305 x 102mm / 3"x12"x4"

Enclosure Mount weight 11.34kg / 25lbs

Environmental

Operating Temperature -29 ~ +60°C / -20 ~ 140°F Batteries can lose up to 50% power below -17.8°C / 0°F

VPS3 Series

Kits include a powder coated aluminum enclosure with integrated pole mount, solar panel/s with pole mount/s, advanced charge controller and power assembly with all necessary breakers, terminal blocks, DIN rail and cabling. Different output voltage options (24, 48 & 56Vdc PoE converters / injectors are available separately and can be connected into the power assembly blocks. Enclosure has space for 2 x 150Ah or 3 x 100Ah batteries (batteries & pole not included).



	100W-12	160W-12	200W-12	200W-24	250W-12	250W-24	300W-12	300W-24	500W-24	600W-24	900W-24
Power											
Max continuous power (W)											
Zone 1	14	20	27	27	35	35	45	45	70	90	130
Zone 2	12.5	18	25	25	30	30	35	35	60	70	105
Zone 3	9.5	14	19	19	22	22	27	27	44	54	81
Zone 4	6.5	10	13	13	15	15	18	18	30	36	54
Zone 5	3.5	5	7	7	8	8	10	10	16	20	30
Solar panel power (W)											
	1 x 100	1 x 160	2 x 100	2 x 100	1 x 245+	1 x 245+	2 x 150+	2 x 150+	2 x 250+	4 x 150+	6 x 150+
Electrical											
Voltage output											
	12Vdc	12Vdc	12Vdc	24Vdc	12Vdc	24Vdc	12Vdc	24Vdc	24Vdc	24Vdc	24Vdc
	10A	10A	10A	10A	10A	10A	10A	10A	10A	10A	10A
Battery capacity											
	2 x 150Ah	2 x 150Ah	2 x 150Ah	2 x 150Ah	2 x 150Ah	2 x 150Ah	2 x 150Ah	2 x 150Ah	2 x 150Ah	2 x 150Ah	2 x 150Ah
Battery voltage											
	12	12	12	24	12	24	12	24	24	24	24
(Vdc)											
Battery type required	Sealed lead acid / Absorbent Glass Mat (AGM)										
Charge controller	Advanced + power assembly					Advanced MPPT + power assembly					
Mechanical											
Solar pole mount											
	Side of pole	Side of pole	Side of pole	Side of pole	Side of pole	Side of pole	Side of pole	Side of pole	2 x side of pole	2 x side of pole	Top
Recommended Pole											
Size	76.2-152.4mm/3-6"										152.4mm/6"
Type	Metal pole or larger wooden utility pole										Schedule 40 Metal
Enclosure Size (int.)	584 x 432 x 356mm / 23" x 17" x 14"										
(ext.)	610 x 457 x 381mm / 24 x 18 x 15"										
(h x w x d)											
Extra space in enclosure	76 x 508 x 203mm / 3" x 20" x 8"										
Enclosure Mount weight	23.13kg / 51lbs										
Environmental											
Operating Temperature	-29 ~ +60°C / -20 ~ 140°F										
	Batteries can lose up to 50% power below -17.8°C / 0°F										
	The VPS3 Series has a vent fan option which is highly recommended for zones 0 -2										
Enclosure NEMA Rating	4X-IP65										
	If vent / fan kit option is added rating becomes 3R										

VPS5 Series

Kits include a rugged aluminum enclosure with pole mount, solar panel/s with pole mount/s, advanced charge controller and power assembly with all necessary breakers, terminal blocks, DIN rail and cabling. Different output voltage options (24, 48 & 56Vdc PoE converters / injectors are available separately and can be connected into the power assembly blocks. Enclosure has space for up to 2 x 250Ah (batteries & pole not included).



KBC-VPS5-	100W-12	160W-12	200W-12	200W-24	250W-12	250W-24	300W-12	300W-24	500W-24	600W-24	900W-24TP	1200W-24TP
Power												
Max continuous power (W)												
Zone 1	14	20	27	27	35	35	45	45	70	90	130	180
Zone 2	12.5	18	25	25	30	30	35	35	60	70	105	140
Zone 3	9.5	14	19	19	22	22	27	27	44	54	81	108
Zone 4	6.5	10	13	13	15	15	18	18	30	36	54	72
Zone 5	3.5	5	7	7	8	8	10	10	16	20	30	40
Solar panel power (W)	1 x 100	1 x 160	2 x 100	2 x 100	1 x 245+	1 x 245+	2 x 150+	2 x 150+	2 x 250+	4 x 150+	6 x 150+	4 x 300+
Electrical												
Voltage output	12Vdc 10A	12Vdc 10A	12Vdc 10A	24Vdc 10A	12Vdc 10A	24Vdc 10A	12Vdc 10A	24Vdc 10A	24Vdc	24Vdc	24Vdc	24Vdc
Battery capacity voltage (Vdc)	2 x 250Ah 12	2 x 250Ah 12	2 x 250Ah 12	2 x 250Ah 24	2 x 250Ah 12	2 x 250Ah 24	2 x 250Ah 12	2 x 250Ah 24	2 x 250Ah 24	2 x 250Ah 24	2 x 250Ah 24	2 x 250Ah 24
Battery type required	Sealed lead acid / Absorbent Glass Mat (AGM)											
Charge controller	Advanced + power assembly				Advanced MPPT + power assembly							
Mechanical												
Solar pole mount	Side of pole	Side of pole	2 x side of pole	2 x side of pole	Side of pole	Side of pole	Side of pole	Side of pole	Side of pole	2 x side of pole	Top	Top
Recommended Pole Size Type	76-152mm/3-6" Metal pole or larger wooden utility pole										152.4mm/6" Schedule 40 metal	
Enclosure Size (int.)	737 x 610 x 356mm / 29 x 24 x 14"											
Enclosure Size (ext.)	762 x 610 x 356mm / 30 x 24 x 14"											
Extra space in enclosure	102 x 533 x 229 / 4"x 21"x 9"											
Enclosure Mount Weight	20.4kg / 45lbs											
Environmental												
Operating Temperature	-29 ~ +60°C / -20 ~ 140°F Batteries can lose up to 50% power below -17.8°C / 0°F											



Peak sun hours map and table courtesy of Vorp Energy

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