

Voltronic Inverter Setup SOP - Pylon Battery

1. Infinisolar - On-grid Solution

(1) Inverter Spec.:

InfiniSolar On-grid Inverter with Energy Storage Selection Guide

PHASE	InfiniSolar 2KW	InfiniSolar Plus 5KW	InfiniSolar 3P 10KW 3-phase In / 3-phase out	
MAXIMUM PV INPUT POWER	2250 W	1-phase in / 1-phase out 4500 W	10000 W	14850 W
RATED OUTPUT POWER	2000 W	3000 W	5000 W	10000 W
MAXIMUM CHARGING POWER	12	oo w	4800 W	9600 W
GRID-TIE OPERATION			22	- 22
PV INPUT (DC)		<u>4</u>	<u> </u>	<u> </u>
Nominal DC Voltage / Maximum DC Voltage	300 VDC / 350 VDC	360 VDC / 500 VDC	720 VDC / 900 VDC	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	80 VDC / 120 VDC	116 VDC / 150 VDC	225 VDC / 250 VDC	320 VDC / 350 VDC
MPP Voltage Range Number of MPP Trackers / Maximum Input Current			250 VDC ~ 850 VDC 2 / 2 x 10 A	400 VDC ~ 800 VDC 2 / 2 x 18.6A
GRID OUTPUT (AC)	1 / 1 x 16 A	1712102	272 \$ 105	2728 10.04
Nominal Output Voltage	101/110/120/127 VAC	208/220/23	30/240 VAC	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	88 - 127 VAC" 184 - 265 VAC"		184 - 265 VAC* per phase	
Nominal Output Current	18 A	13 A	21 A	14.5A per phase
Power Factor		> 0	1.99	62
EFFICIENCY		÷		
Maximum Conversion Efficiency (DC/AC)	95%		95%	
European Efficiency@ Vnominal	94%		95%	
OFF-GRID OPERATION AC INPUT				
				120 - 140 VAC per phase /
AC Start-up Voltage/Auto Restart Voltage	60 - 70 VAC / 85 VAC		AC / 180 VAC	180 VAC per phase
Acceptable Input Voitage Range Maximum AC Input Current	80 - 130 VAC	170 - 2 0 A		170 - 280 VAC per phase
PV INPUT (DC)	3		4	w.n.
Maximum DC Voltage	350 VDC	500 VDC	900 VDC	900 VDC
MPP Voltage Range	150 VDC ~ 320 VDC	250 VDC ~ 450 VDC	250 VDC ~ 850 VDC	400 VDC ~ 800 VDC
Number of MPP Trackers / Maximum Input Current	1/1 x 15 A	1/1x18A	2/2 x 10A	2/2 x 18.6A
BATTERY MODE OUTPUT (AC)		2		2.5
Nominal Output Voltage	101/110/120/127 VAC	202/208/220/230/240 VAC	202/208/220/230/240 VAC	230 VAC (P-N) / 400 VAC (P-P)
Output Waveform			newave	
Efficiency (DC to AC)	90%	93	3%	91%
				15
HYBRID OPERATION				
PV INPUT (DC)				
	An available to the test to the test of the test of the test	The second secon	11	
Nominal DC Voltage / Maximum DC Voltage	300 VDC / 350 VDC	360 VDC / 500 VDC	720 VDC / 900 VDC	720 VDC / 900 VDC
Nominal DC Voltage / Maximum DC Voltage Start-up Voltage / Initial Feeding Voltage	300 VDC / 350 VDC 80 VDC / 120 VDC	360 VDC / 500 VDC 118 VDC / 150 VDC	720 VDC / 900 VDC 225 VDC / 250 VDC	720 VDC / 900 VDC 320 VDC / 350 VDC
				2 State State State State State
Start-up Voltage / Initial Feeding Voltage	80 VDC / 120 VDC	118 VDC / 150 VDC	225 VDC / 250 VDC	320 VDC / 350 VDC
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range	80 VDC / 120 VDC 150 VDC ~ 320 VDC	116 VDC / 150 VDC 250 VDC ~ 450 VDC	225 VDC / 250 VDC 250 VDC ~ 850 VDC	320 VDC / 350 VDC 400 VDC ~ 800 VDC
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current	80 VDC / 120 VDC 150 VDC ~ 320 VDC	116 VDC / 150 VDC 250 VDC ~ 450 VDC	225 VDC / 250 VDC 250 VDC ~ 850 VDC	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 × 18.6A
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC)	80 VDC / 120 VDC 150 VDC ~ 320 VDC 1 / 1 x 15 A	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 x 18 A 202/208/220/230/240 VAC	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 × 18.8A 230 VAC (P-N) / 400 VAC (P-F
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage	80 VDC / 120 VDC 150 VDC ~ 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 x 18 A 202/208/220/230/240 VAC	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 × 18.8A 230 VAC (P-N) / 400 VAC (P-F
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range	80 VDC / 120 VDC 150 VDC ~ 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC*	116 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 x 18 A 202/208/220/230/240 VAC 184 - 26	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 44.5 VAC*	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 × 18.8A 230 VAC (P-N) / 400 VAC (P-F 184 - 264.5 VAC* per phase
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT	80 VDC / 120 VDC 150 VDC ~ 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 x 18 A 202/208/220/230/240 VAC 184 - 26 13 A	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 × 18.8A 230 VAC (P-N) / 400 VAC (P-F 184 - 284.5 VAC* per phase 14.5 A per phase 120 - 140 VAC per phase /
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current	80 VDC / 120 VDC 150 VDC ~ 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 × 18 A 200/208/220/230/240 VAC 184 - 26 13 A 120 - 140 V/	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A AC / 180 VAC	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 × 18.8A 230 VAC (P-N) / 400 VAC (P-F 184 - 264.5 VAC* per phase 14.5 A per phase 120 - 140 VAC per phase / 180 VAC per phase
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage / Auto Restart Voltage Acceptable Input Voltage Range	80 VDC / 120 VDC 150 VDC ~ 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 × 18 A 200/208/220/230/240 VAC 184 - 26 13 A 120 - 140 V/	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 × 18.8A 230 VAC (P-N) / 400 VAC (P-F 184 - 284.5 VAC* per phase 14.5 A per phase 120 - 140 VAC per phase /
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage / Auto Restart Voltage	80 VDC / 120 VDC 150 VDC ~ 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC 80 - 130 VAC	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 × 18 A 200/208/220/230/240 VAC 184 - 26 13 A 120 - 140 V/	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A AC / 180 VAC 280 VAC	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 × 18.8A 230 VAC (P-N) / 400 VAC (P-F 184 - 264.5 VAC* per phase 14.5 A per phase 120 - 140 VAC per phase / 180 VAC per phase
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage / Auto Restart Voltage Acceptable Input Voltage Range	80 VDC / 120 VDC 150 VDC ~ 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC 80 - 130 VAC	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 × 18 A 202/208/220/230/240 VAC 184 - 26 13 A 120 - 140 V/ 170 - 2	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A AC / 180 VAC 280 VAC	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 × 18.8A 230 VAC (P-N) / 400 VAC (P-F 184 - 264.6 VAC* per phase 14.5 A per phase 120 - 140 VAC per phase 180 VAC per phase 170 - 280 VAC per phase
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage / Auto Restart Voltage Acceptable Input Voltage Range Maximum AC Input Current	80 VDC / 120 VDC 150 VDC ~ 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC 80 - 130 VAC	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 × 18 A 202/208/220/230/240 VAC 184 - 26 13 A 120 - 140 V/ 170 - 2	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A AC / 180 VAC 280 VAC	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 x 18.8A 230 VAC (P-N) / 400 VAC (P-1 184 - 264.5 VAC* per phase 14.5 A per phase 120 - 140 VAC per phase 180 VAC per phase 170 - 280 VAC per phase
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage / Auto Restart Voltage Acceptable Input Voltage Range Maximum AC Input Current BATTERY MODE OUTPUT (AC)	80 VDC / 120 VDC 150 VDC ~ 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC 80 - 130 VAC 3	116 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 x 18 A 202/208/220/230/240 VAC 184 - 26 13 A 120 - 140 V/ 170 - 2 30 A 202/208/220/230/240 VAC	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 4.5 VAC* 21 A AC / 180 VAC 280 VAC	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 x 18.8A 230 VAC (P-N) / 400 VAC (P-1 184 - 264.5 VAC* per phase 14.5 A per phase 120 - 140 VAC per phase 120 - 140 VAC per phase 170 - 280 VAC per phase
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage / Auto Restart Voltage Acceptable Input Voltage Range Maximum AC Input Current BATTERY MODE OUTPUT (AC) Nominal Output Voltage	80 VDC / 120 VDC 150 VDC - 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC 80 - 130 VAC 30 - 130 VAC 30 - 130 VAC	116 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 x 18 A 202/208/220/230/240 VAC 184 - 26 13 A 120 - 140 V/ 170 - 2 30 A 202/208/220/230/240 VAC	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A AC / 180 VAC 280 VAC 202/208/220/230/240 VAC	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 × 18.8A 230 VAC (P-N) / 400 VAC (P-1 184 - 264.5 VAC* per phase 14.5 A per phase 120 - 140 VAC per phase 170 - 280 VAC per phase 30 VAC (P-N) / 400 VAC (P-F
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage Range Maximum AC Input Current BATTERY MODE OUTPUT (AC) Nominal Output Voltage Efficiency (DC to AC)	80 VDC / 120 VDC 150 VDC - 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC 80 - 130 VAC 30 - 130 VAC 30 - 130 VAC	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 × 18 A 202/208/220/230/240 VAC 13 A 120 - 140 V/ 170 - 2 30 A 202/208/220/230/240 VAC 9	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A AC / 180 VAC 280 VAC 202/208/220/230/240 VAC	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 × 18.8A 230 VAC (P-N) / 400 VAC (P-1 184 - 264.5 VAC* per phase 14.5 A per phase 120 - 140 VAC per phase 170 - 280 VAC per phase 170 - 280 VAC per phase 230 VAC (P-N) / 400 VAC (P-F
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Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage / Auto Restart Voltage Acceptable Input Voltage Range Maximum AC Input Current BATTERY MODE OUTPUT (AC) Nominal Output Voltage Efficiency (DC to AC) BATTERY & CHARGER Nominal DC Voltage Maximum Charging Current	80 VDC / 120 VDC 150 VDC ~ 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC 80 - 130 VAC 101/110/120/127 VAC 90%	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 × 18 A 202/208/220/230/240 VAC 13 A 120 - 140 V/ 170 - 2 30 A 202/208/220/230/240 VAC 9	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A AC / 180 VAC 280 VAC 202/208/220/230/240 VAC 3%	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 x 18.6A 230 VAC (P-N) / 400 VAC (P-1 194 - 264.5 VAC* per phase 14.5 A per phase 14.5 A per phase 120 - 140 VAC per phase 170 - 280 VAC per phase 230 VAC (P-N) / 400 VAC (P-P 91%
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage Range Maximum AC Input Current BATTERY MODE OUTPUT (AC) Nominal Output Voltage Efficiency (DC to AC) BATTERY & CHARGER Nominal DC Voltage Maximum Charging Current.	80 VDC / 120 VDC 150 VDC ~ 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC 80 - 130 VAC 101/110/120/127 VAC 90%	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 x 18 A 202/208/220/230/240 VAC 184 - 26 13 A 120 - 140 V/ 170 - 2 30 A 202/208/220/230/240 VAC 9 48	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A AC / 180 VAC 280 VAC 202/208/220/230/240 VAC 3% VDC Default 60A, 5A - 100A	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 x 18.8A 230 VAC (P-N) / 400 VAC (P-1 184 - 264.5 VAC° per phase 14.5 A per phase 120 - 140 VAC per phase 170 - 280 VAC per phase 230 VAC (P-N) / 400 VAC (P-F 91% Default 60A, 10A - 200A
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage / Auto Restart Voltage Acceptable Input Voltage Range Maximum AC Input Current BATTERY MODE OUTPUT (AC) Nominal Output Voltage Efficiency (DC to AC) BATTERY & CHARGER Nominal DC Voltage Maximum Charging Current	80 VDC / 120 VDC 150 VDC ~ 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC 80 - 130 VAC 101/110/120/127 VAC 90%	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 x 18 A 202/208/220/230/240 VAC 184 - 26 13 A 120 - 140 V/ 170 - 2 30 A 202/208/220/230/240 VAC 9 48	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A AC / 180 VAC 280 VAC 202/208/220/230/240 VAC 3% VDC Default 60A, 5A - 100A (Adjustable)	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 x 18.8A 230 VAC (P-N) / 400 VAC (P-1 184 - 264.5 VAC° per phase 14.5 A per phase 120 - 140 VAC per phase 170 - 280 VAC per phase 230 VAC (P-N) / 400 VAC (P-F 91% Default 60A, 10A - 200A
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage Range Maximum AC Input Current BATTERY MODE OUTPUT (AC) Nominal Output Voltage Efficiency (DC to AC) BATTERY & CHARGER Nominal DC Voltage Maximum Charging Current.	80 VDC / 120 VDC 150 VDC ~ 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC 80 - 130 VAC 101/110/120/127 VAC 90% Default 25A, 5A	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 x 18 A 202/208/220/230/240 VAC 184 - 26 13 A 120 - 140 V/ 170 - 2 30 A 202/208/220/230/240 VAC 9 48	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A AC / 180 VAC 280 VAC 202/208/220/230/240 VAC 3% VDC Default 60A, 5A - 100A	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 x 18.8A 230 VAC (P-N) / 400 VAC (P-1 184 - 264.5 VAC* per phase 14.5 A per phase 120 - 140 VAC per phase 170 - 280 VAC per phase 230 VAC (P-N) / 400 VAC (P-F 91% Default 60A, 10A - 200A
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage Range Maximum AC Input Current BATTERY MODE OUTPUT (AC) Nominal Output Voltage Efficiency (DC to AC) BATTERY & CHARGER Nominal DC Voltage Maximum Charging Current. GENERAL PHYSICAL	80 VDC / 120 VDC 150 VDC ~ 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC 80 - 130 VAC 101/110/120/127 VAC 90% Default 25A, 5A 107 x -	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 × 18 A 202/208/220/230/240 VAC 184 - 26 13 A 120 - 140 V/ 170 - 2 30 A 202/208/220/230/240 VAC 9: 48 x - 25A (Adjustable)	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A AC / 180 VAC 280 VAC 202/208/220/230/240 VAC 3% VDC Default 60A, 5A - 100A (Adjustable)	320 VDC / 360 VDC 400 VDC ~ 800 VDC 2 / 2 × 18.6A 230 VAC (P-N) / 400 VAC (P-1 184 - 284.5 VAC' per phase 14.5 A per phase 120 - 140 VAC per phase 120 - 140 VAC per phase 170 - 280 VAC per phase 170 - 280 VAC per phase 230 VAC (P-N) / 400 VAC (P-F 91% Default 60A, 10A - 200A (Adjustable)
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage / Auto Restart Voltage Acceptable Input Voltage Range Maximum AC Input Current BATTERY MODE OUTPUT (AC) Nominal Output Voltage Efficiency (DC to AC) BATTERY & CHARGER Nominal DC Voltage Maximum Charging Current. GENERAL PHYSICAL Dimension, D X W X H (mm)	80 VDC / 120 VDC 150 VDC ~ 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC 80 - 130 VAC 101/110/120/127 VAC 90% Default 25A, 5A 107 x -	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 x 18 A 202/208/220/230/240 VAC 184 - 26 13 A 120 - 140 V/ 170 - 2 30 A 202/208/220/230/240 VAC 9 48 x - 25A (Adjustable) 438 x 480	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A AC / 180 VAC 280 VAC 202/208/220/230/240 VAC 3% VDC Default 80A, 5A - 100A (Adjustable) 204.2 × 480 × 600	320 VDC / 360 VDC 400 VDC ~ 800 VDC 2 / 2 × 18.6A 230 VAC (P-N) / 400 VAC (P-1 184 - 284.5 VAC* per phase 14.5 A per phase 120 - 140 VAC per phase / 180 VAC per phase 170 - 280 VAC per phase 230 VAC (P-N) / 400 VAC (P-F 91% Default 60A, 10A - 200A (Adjustable) 167.5 × 500 × 622
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage / Auto Restart Voltage Acoeptable Input Voltage Range Maximum AC Input Current BATTERY MODE OUTPUT (AC) Nominal Output Voltage Efficiency (DC to AC) BATTERY & CHARGER Nominal DC Voltage Maximum Charging Current. GENERAL PHYSICAL Dimension, D X W X H (mm) Net Weight (kgs)	80 VDC / 120 VDC 150 VDC - 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC 80 - 130 VAC 101/110/120/127 VAC 90% Default 25A, 5A 107 x -	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 x 18 A 202/208/220/230/240 VAC 184 - 26 13 A 120 - 140 V/ 170 - 2 30 A 202/208/220/230/240 VAC 9 48 x - 25A (Adjustable) 438 x 480	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A AC / 180 VAC 202/208/220/230/240 VAC 202/208/220/230/240 VAC 3% VDC Default 60A, 5A - 100A (Adjustable) 204.2 × 460 × 600 29	320 VDC / 360 VDC 400 VDC ~ 800 VDC 2 / 2 × 18.6A 230 VAC (P-N) / 400 VAC (P-1 184 - 284.5 VAC* per phase 14.5 A per phase 120 - 140 VAC per phase / 180 VAC per phase 170 - 280 VAC per phase 230 VAC (P-N) / 400 VAC (P-F 91% Default 60A, 10A - 200A (Adjustable) 167.5 × 500 × 622
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage / Auto Restart Voltage Acoeptable Input Voltage Range Maximum AC Input Current BATTERY MODE OUTPUT (AC) Nominal Output Voltage Efficiency (DC to AC) BATTERY A CHARGER Nominal DC Voltage Maximum Charging Current. GENERAL PHYSICAL Dimension, D X W X H (mm) Net Weight (kgs) INTERFACE	80 VDC / 120 VDC 150 VDC - 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC 80 - 130 VAC 101/110/120/127 VAC 90% Default 25A, 5A 107 x -	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 x 18 A 200/208/220/230/240 VAC 184 - 26 13 A 120 - 140 V/ 170 - 2 30 A 200/208/220/230/240 VAC 9 48 x - 25A (Adjustable) 438 x 480 15.5	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A AC / 180 VAC 202/208/220/230/240 VAC 202/208/220/230/240 VAC 3% VDC Default 60A, 5A - 100A (Adjustable) 204.2 × 460 × 600 29	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 × 18.6A 230 VAC (P-N) / 400 VAC (P-1 184 - 264.5 VAC* per phase 14.5 A per phase 120 - 140 VAC per phase 120 - 140 VAC per phase 170 - 280 VAC per phase 170 - 280 VAC per phase 230 VAC (P-N) / 400 VAC (P-F 91% Default 60A, 10A - 200A (Adjustable) 167.5 × 500 × 622 45
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage / Auto Restart Voltage Acceptable Input Voltage Range Maximum AC Input Current BATTERY MODE OUTPUT (AC) Nominal Output Voltage Efficiency (DC to AC) BATTERY & CHARGER Nominal DC Voltage Maximum Charging Current. GENERAL PHYSICAL. Dimension, D, X W X H (mm) Net Weight (kgs) INTERFACE Communication Port	80 VDC / 120 VDC 150 VDC - 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC 80 - 130 VAC 101/110/120/127 VAC 90% Default 25A, 5A 107 x -	118 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 x 18 A 200/208/220/230/240 VAC 184 - 26 13 A 120 - 140 V/ 170 - 2 30 A 200/208/220/230/240 VAC 9 48 x - 25A (Adjustable) 438 x 480 15.5	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A AC / 180 VAC 280 VAC 202/208/220/230/240 VAC 280 VAC 202/208/220/230/240 VAC 3% VDC Default 60A, 5A - 100A (Adjustable) 204.2 × 460 × 600 29	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 × 18.6A 230 VAC (P-N) / 400 VAC (P-1 184 - 264.5 VAC* per phase 14.5 A per phase 120 - 140 VAC per phase 120 - 140 VAC per phase 170 - 280 VAC per phase 170 - 280 VAC per phase 230 VAC (P-N) / 400 VAC (P-F 91% Default 60A, 10A - 200A (Adjustable) 167.5 × 500 × 622 45
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage / Auto Restart Voltage Acoeptable Input Voltage Range Maximum AC Input Current BATTERY MODE OUTPUT (AC) Nominal Output Voltage Efficiency (DC to AC) BATTERY & CHARGER Nominal DC Voltage Maximum Charging Current. GENERAL PHYSICAL Dimension, D. X W X H (mm) Net Weight (kgs) INTERFACE Communication Port Intelligent Slot	80 VDC / 120 VDC 150 VDC - 320 VDC 1 / 1 x 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC 80 - 130 VAC 101/110/120/127 VAC 90% Default 25A, 5A 107 x -	116 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 x 18 A 202/208/220/230/240 VAC 184 - 28 13 A 120 - 140 V/ 170 - 2 30 A 202/208/220/230/240 VAC 9 48 - 25A (Adjustable) 438 x 480 15.5 32/USB Optional SNMP, Modbus a	225 VDC / 250 VDC 250 VDC ~ 850 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A AC / 180 VAC 280 VAC 202/208/220/230/240 VAC 280 VAC 202/208/220/230/240 VAC 3% VDC Default 60A, 5A - 100A (Adjustable) 204.2 × 460 × 600 29	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 × 18.6A 230 VAC (P-N) / 400 VAC (P- 184 - 264.5 VAC° per phase 14.5 A per phase 120 - 140 VAC per phase 120 - 140 VAC per phase 170 - 280 VAC per phase 180 VAC per phase 170 - 280 VAC per phase 180 VAC per ph
Start-up Voltage / Initial Feeding Voltage MPP Voltage Range Number of MPP Trackers / Maximum Input Current GRID OUTPUT (AC) Nominal Output Voltage Output Voltage Range Nominal Output Current AC INPUT AC Start-up Voltage / Auto Restart Voltage Acceptable Input Voltage Range Maximum AC Input Current BATTERY MODE OUTPUT (AC) Nominal Output Voltage Efficiency (DC to AC) BATTERY & CHARGER Nominal DC Voltage Maximum Charging Current. GENERAL PHYSICAL Dimension, D X W X H (mm) Net Weight (kgs) IntERFACE Communication Port Intelligent Slot ENVIRONMENT	80 VDC / 120 VDC 150 VDC ~ 320 VDC 1 / 1 × 15 A 101/110/120/127 VAC 88-127 VAC* 18 A 60 - 70 VAC / 85 VAC 80 - 130 VAC 20% Default 25A, 5A 107 × -	116 VDC / 150 VDC 250 VDC ~ 450 VDC 1 / 1 x 18 A 202/208/220/230/240 VAC 184 - 28 13 A 120 - 140 V/ 170 - 2 30 A 202/208/220/230/240 VAC 9 48 - 25A (Adjustable) 438 x 480 15.5 32/USB Optional SNMP, Modbus a	225 VDC / 250 VDC 250 VDC ~ 860 VDC 2 / 2 × 10A 202/208/220/230/240 VAC 34.5 VAC* 21 A AC / 180 VAC 280 VAC 202/208/220/230/240 VAC 3% VDC Default 60A, 5A - 100A (Adjustable) 204.2 × 460 × 600 29 RS-232/USB a and AS-400 cards available Ion-Condensing)	320 VDC / 350 VDC 400 VDC ~ 800 VDC 2 / 2 x 18.8A 230 VAC (P-N) / 400 VAC (P-1 184 - 264.5 VAC* per phase 14.5 A per phase 120 - 140 VAC per phase 120 - 140 VAC per phase 170 - 280 VAC per phase 170 - 280 VAC per phase 230 VAC (P-N) / 400 VAC (P-F 91% Default 60A, 10A - 200A (Adjustable) 167.5 x 500 x 822 45



Pylon Technologies Co., Ltd. No. 73, Lane 887, Zu Chongzhi Road, Zhangjiang Hi-Tech Park Pudong.

Shanghai 201203, China

(2) General Com							
Battery Type	US2000B/Phantom-S						
Inverter Type	Infinisolar 2kW	Infinisolar	Plus	Infinisolar	Plus	Infinisolar	
		3kW		5kW		3P 10kW	
Recommend	According to load	According to load requirement and inverter rated power.					
battery Amount	Battery Amo	unt N = Load	d powe	r/1200W			
Communication	Not required, but need finish the setting on Inverter software						
DOD	80%						
Working Temp.	0 - 50℃(Indoor o	peration)					
Charge/Dischar	N*25, N = Battery	/ amount					
ge Current		- -					
Warranty	5yrs						

(2) General Compatible Condition:

(3) Inverter set up:

(a) Connect PV or Grid power to wake up inverter; Connect the communication cable from Inverter to computer.





(b) Open 'Solarpower.exe' (the inverter set up software), Log in .

	SolarPower SolarPower configuration Device control	View Languaga Halp	Guést	Monthied	levce USBEAS	30E3_9613160610	2241 Saviern lime, 201 Elestic Information	-05-04 13	33.01 Term	eratore '28.0 °C		
Sec.	USBEA8B6E3_96131608100241		1				End votage:	227.4		Load level:		
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(c)Press 'Parameters Setting'.

E Ima-PC	to the detailts synchronization data		Basic Information		
	in control	Gad-be with backup	Grid voltage 228.9 V		
			Grid frequency: 49.9 Hz	Battery voltage:	49.8 V
			Pv input voltage 343.9 V	Battery capacity:	
	SCLAN PU MINAN	artor.		Charging current;	
	PLANAY	مىن			
		+ armer			
	Power information	0.0070			Perhour
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	۲۹) input sower: 224 ۲۷ Today: 6.0050 KWh This month: 6.0050 KWh	€.005 €.006 €.006 €.006 €.006 €.006 €.006 €.006 €.006 €.006			Dially Dially
	۲۹) input sower: 224 ۲۷ Today: 6.0050 KWh This month: 6.0050 KWh	€ 2006 € 2006			Dially Dially

(d) Set the parameter according to below recommendation, the max. charge current refer to the specific battery amount of real application. Then click 'Apply'. According to the inverter limitation, for 2kW&3kW inverter max. is 25A, for 5kW max. is 100A, for 10kW max. is 200A.

Parameters setting				
Min. grid-connected voltage	e: 189 🐺 V	Apply	The waiting time before grid-connection: 30 🚔 Sec. Appl	
Max grid-connected voltage	a: 263.5 V	Apply	Max. grid-connected average voltage: 253 🚆 V 🛛 🗛 🔤	1
Min. grid-connected frequenc	y: 47.6 🐺 Hz	Apply	Max.feed-in grid power: 3,000 🚆 W 🛛 Appl	G
Max. grid-connected frequenc	y: 50.1 🚰 Hz	Apply		
Min. PV input voltage:	90 🎒 V	Apply	Bulk charging voltage(C.V. voltage); 53.2 V Appl	/)
Max. PV input voltage:	500 🐺 V	Apply	Floating charging vollage: 53.2 V Appl	
Min. MPP voltage:	120 🗧 V	Apply	Battery cut-off discharging voltage when Grid is available: 48 🚑 V 🔥	
Max. MPP voltage:	450 V	Apply	Battery re-discharging voltage when Grid is available: 50 🍧 V Appl	
Max. charging current.	25 A	Apply.	Battery cut-off discharging voltage when Grid is unavailable: 48 🚆 V 🔥 Appl	9
Start LCD screen-saver after:	300 💌 Sec.	Apply	Battery re-discharging voltage when Grid is unavailable: 50 V	
Nute Buzzer	alarm 🔘 Enable	🖲 Disable	Apply Mute alarm in battery mode. 🔿 Enable 🔹 Disable Appl	
Mute the buzzer in the Standby	mode: 🔿 Enable	• Oisable	Apply Generator as AC source: C Enable O Disable	
When float charging current is less	than X (A) and conti	nued T (Min),th	en charger off, when battery voltage is less than Y (V),then charger on again.	
x 0 🖉 🔺	T: 60	Min.	Y: 51.5 V Apply	
🥌 Any schedule cl	hange will affect the	power generat	ed and shall be conservatively made.	
System time: 2017-05-04	.			
13:34:46	Apply			



2. Axpert - Off-grid Solution

(1) Inverter Spec.:

MODEL	Axpert MKS 1K-24	Axpert MKS 1K-48	Axpert MKS 2K-24	Axpert MKS 3K-24	Axpert MKS 3K-48	Axpert MKS 4K	Axpert MKS 5K				
Rated Power	1000VA/800W	1000VA/1000W	2000VA/1600W	3000VA/2400W	3000VA/2400W	4000VA/3200W	5000VA/4000W				
INPUT		1		· · · · · · · · · · · · · · · · · · ·							
Voltage				230 VAC							
Selectable Voltage Range		170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)									
Frequency Range		50 Hz/60 Hz (Auto sensing)									
OUTPUT											
AC Voltage Regulation (Batt. Mode)				230VAC ± 5%							
Surge Power	200	AVO	4000VA	600	AVO	8000VA	10000VA				
Efficiency (Peak)	90%	- 93%			93%						
Transfer Time		10 m	s (For Personal C	omputers); 20 ms	(For Home Applia	nces)					
Waveform				Pure sine wave							
BATTERY											
Battery Voltage	24 VDC	48 VDC	24 VDC	24 VDC	48 VDC	48	VDC				
Floating Charge Voltage	27 VDC	54 VDC	27 VDC	27 VDC	54 VDC	54	VDC				
Overcharge Protection	31 VDC	62 VDC	31 VDC	31 VDC	62 VDC	60	VDC				
SOLAR CHARGER & AC CH	ARGER										
Maximum PV Array Power	600W	900W	600W	600W	900W	400	00W				
MPPT Range @ Operating Voltage	30VDC ~ 66VDC	60VDC ~ 88VDC	30VDC ~ 66VDC	30VDC ~ 66VDC	60VDC ~ 88VDC	60VDC	-115VDC				
Maximum PV Array Open Circuit Voltage	75VDC	102VDC	75VDC	75VDC	102VDC	145	VDC				
Maximum Solar Charge Current	25A	18A	25A	25A	18A	8	D A				
Maximum AC Charge Current	20A	15A	30A	30A	15A	61	A				
Maximum Charge Current	45A	33A	55A	55A	33A	14	0 A				
Maximum Efficiency				98%							
Standby Power Consumption				2 W							
PHYSICAL											
Dimension, D x W x H (mm)			100 x 272 x 355			120 x 2	95 x 468				
Net Weight (kgs)	6	.8	7.0	7	4	1	11				
OPERATING ENVIRONMEN	т										
Humidity			5% to 95% Re	lative Humidity (Ne	on-condensing)						
Operating Temperature				0°C - 55°C							
Storage Temperature				-15°C - 60°C							

(2) General Compatible Condition:

Battery Type		US2000B/Phanto	om-S				
Inverter Type	Axpert	Axpert Axpert Axpert Axpert					
	MKS 1K-48	MKS 3K-48	MKS 4K	MKS 5K			
Max.	33A	33A	140A	140A			
charge current							
Recommend	According to load requirement and inverter rated power.						
battery Amount	Battery Amount N = Load power/1200W						
Communication	Not required, but	Not required, but need finish the setting on Inverter.					
DOD	80%						
Working Temp.	0 - 50°C (Indoor operation)						
Charge/Dischar	N*25, N = Battery amount						
ge Current							
Warranty	5yrs						



- (3) Inverter set up:
- (a) Connect Inverter with battery, wake up inverter.



(b) Press 'Enter' for 5s, to enter into the setting.





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(c) Press 'Up' and 'Down' to choose the setting item No., press 'Enter' to enter into the detailed setting parameter, when finish press 'Enter' again. The following setting items need to be set follow the recommended value:

Item No.	Setting Value
Program 02	Set to N*25A, N=battery amount
Program 05	Set to USE
Program 12	Set to 48V
Program 13	Set to 51V
Program 26	Set to 53.2V
Program 29	Set to 47.5V



Note: Axpert Inverter can only be waked up via battery, if the battery is turned off due to over-discharge, over temp. or other reasons, in order to wake up the inverter you need turn on the battery manually.

Any further questions to this SOP please contact us via service@pylontech.com.cn