

# Offgrid solar system & Residential storage system

(SPF 2000 - 5000 TL HVM)



US:  
405 Boulder Court  
Pleasanton, CA 94566  
(925) 398-8466, (925) 954-4770  
team@innoliaenergy.com



India:  
16-11-741/c/3 Moosarambagh  
Dilsukhnagar, Hyderabad 500060  
040-40274296, +91-7799992037  
+91-9010752755, info@innoliaenergy.com



Factory:  
284-2-88/1 Lingotam  
Kuntlagudem, Telangana 508252  
+91-9182543576, +91-9825969807  
+91-9866586771, sales@innoliaenergy.com

## Technical Specification-Inverter

Parameter/Model	SPF 2000TL HVM	SPF 3000TL HVM	SPF 3000TL HVM-48	SPF 4000TL HVM	SPF 5000TL HVM
Battery voltage	24VDC	24VDC	48VDC	48VDC	48VDC
INVERTER OUTPUT					
RATED POWER	2000VA/ 2000W	3000VA/ 3000W	3000VA/ 3000W	4000VA/ 4000W	5000VA/ 5000W
Parallel Capability	No	No	No	Yes, 6 units	Yes, 6 units
AC Voltage Regulation (Battery Mode)	230VAC ± 5%, @50/60HZ				
Surge Power	4000VA	6000VA	6000VA	8000VA	10000VA
Efficiency (Peak)	93%	93%	93%	93%	93%
Waveform	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave
Transfer Time	10 ms (For Personal Computers); 20 ms (For Home Appliances)				
SOLAR CHARGER					
Maximum PV Array Power	1000W	1000W	2400W	4500W	4500W
MPPT Range @ Operating Voltage	30VDC ~ 80VDC	30VDC ~ 80VDC	60VDC ~ 115VDC	60VDC ~115VDC	60VDC ~115VDC
Max. PV Array Open Circuit Voltage	100VDC	100VDC	145VDC	145VDC	145VDC
Maximum Solar Charge Current	50A	50A	40A	80A	80A
Maximum Efficiency	97%	97%	97%	97%	97%
Standby Power Consumption	2 W	2 W	2 W	2 W	2 W
AC CHARGER					
Charge Current	30A	30A	15A	60A	60A
AC Input Voltage	230 VAC	230 VAC	230 VAC	230 VAC	230 VAC
Selectable Voltage Range	170-280 VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances)				
Frequency Range	50Hz/60Hz (Auto sensing)				
PHYSICAL					
Dimension (D/W/H) in mm	120/315/390	120/315/390	120/315/390	130/350/455	130/350/455
Net Weight (kgs)	7	8	8	14.5	14.5
OPERATING ENVIRONMENT					
Humidity	5% to 95% RelativeHumidity(Non-condensing)				
Operating Temperature	0°C - 55°C	0°C - 55°C	0°C - 55°C	0°C - 55°C	0°C - 55°C
Storage Temperature	-15°C - 60°C	-15°C - 60°C	-15°C - 60°C	-15°C - 60°C	-15°C - 60°C
LFP Battery					
Back Up time	1Hr	1Hr	1Hr	1Hr	1Hr
Parameters	25.6V 85AH	25.6V 130AH	48V 70AH	48V 100AH	48V 120AH
Energy	2176Wh	3328Wh	3360Wh	4800Wh	5760Wh
Chemistry	LFP	LFP	LFP	LFP	LFP
Nominal Voltage	25.6V	25.6V	48V	48V	48V
Rated Capacity	85AH	130AH	70AH	100AH	120AH
Charging Voltage	29.2V	29.2V	54.75V	54.75V	54.75V
End Voltage	22.4V	22.4V	42V	42V	42V
Standerd Charging Current	17A(0.2C) to 43A(0.5C)	28A(0.2C) to 65A(0.5C)	14A(0.2C) to 35A(0.5C)	20A(0.2C) to 50A(0.5C)	25A(0.2C) to 60A(0.5C)
Max. Continuous Discharge Current	85A(1C)*	130A(1C)*	70A(1C)*	100A(1C)*	120A(1C)*
Temperature °C	0°C – 55°C	0°C – 55°C	0°C – 55°C	0°C – 55°C	0°C – 55°C
	0°C – 65°C	0°C – 65°C	0°C – 65°C	0°C – 65°C	0°C – 65°C
	-20°C – 70°C	-20°C – 70°C	-20°C – 70°C	-20°C – 70°C	-20°C – 70°C
Life Cycles(at 80% DOD)	>2500Cycles	>2500Cycles	>2500Cycles	>2500Cycles	>2500Cycles
Weight	23kg	34kg	23kg	40kg	56kg
Dimensions of Cabinet (LxWxH)	562*82*320	434*146*320	338*242*170	338*338*250	338*402*250
Type of enclosure	Sheet Metal	Sheet Metal	Sheet Metal	Sheet Metal	Sheet Metal
Type Of Connector	Anderson	Anderson	Anderson Connector	Anderson Connector	Anderson Connector
BMS Protection	(Short Circuit Protection, Over voltage Protection, Under Voltage Protection, OverDischarge/ Charge Protection/				
Communication	CAN/RS485(Optional)				