

# Bring Home the Sun. Generate your own Green Power...

SWELECT power pack gives you clean and green power.

Choose the smartest and the simplest power solution for your home / small enterprise.

**SWEES**  
SOLAR POWER PACK



## No more power cuts. No more worries.

SWELECT Energy Systems Limited, renowned for its reliability and expertise in Power Electronics, offers you legendary Solar Power Pack models that are so easy to install and SWELECT's SHMds are your ideal choice for home and small office use. These models offer back-up power for light, fans, PC, and even heavier loads such as refrigerator, heater etc

With SWELECTS Solar Power Packs, celebrate freedom from power cuts...forever.

### FEATURES

- Battery Charging through both solar and Grid
- Inbuilt solar priority system
- High reliability
- Intelligent solar Charger
- Overload Protection
- Short circuit protection
- Auto Restart
- Auto bypass
- High efficiency - green inverter
- Easy to install and use
- Monitoring available (optional)
- Generator Compatibility

# TECHNICAL SPECIFICATION:

SWEES MODEL NO	SHMd 800	SHMd 1000	SHMd 2000		SHMd 3000	SHMd 5000	SHMd 7500
<b>AC input Parameters</b>							
Nominal Voltage	220/230/240 VAC						
User Selectable Mode	PCU	PCU	-		-	-	-
Acceptable Voltage Range	110-270V AC	110-270V AC	120 - 280VAC	120 - 280VAC	120 - 280VAC	120 - 280VAC	120 - 280VAC
Frequency	40Hz - 60 Hz	40Hz - 60 Hz	40Hz - 60 Hz	40Hz - 60 Hz	40Hz - 60 Hz	40Hz - 60 Hz	40Hz - 60 Hz
Low Voltage Transfer	110 VAC ±2%	110 VAC ±2%	120VAC ±2%	120VAC ±2%	120VAC ±2%	120VAC ±2%	120VAC ±2%
Low Voltage Return	135VAC ±2%	135VAC ±2%	130VAC ±2%	130VAC ±2%	130VAC ±2%	130VAC ±2%	130VAC ±2%
High Voltage Transfer	270 VAC ±2%	270 VAC ±2%	290VAC ±2%	290VAC ±2%	290VAC ±2%	290VAC ±2%	290VAC ±2%
High Voltage Return	260 VAC ±2%	260 VAC ±2%	280VAC ±2%	280VAC ±2%	280VAC ±2%	280VAC ±2%	280VAC ±2%
<b>Output Parameters</b>							
Power rating VA/Watt	800VA/ 550 W	1000VA/ 800W	2000VA/ 1600W		3000VA/ 2400W	5000VA/ 4000W	7500VA/ 6000W
Voltage (Bat mode)	220/230/240VAC(Factory - Settable)						
Voltage regulation (Bat mode)	<3% RMS for entire battery voltage range						
Frequency (Line mode)	Same as AC input						
Frequency (Bat mode)	50 Hz ± 0.1 Hz						
Power factor	0.685	0.8					
Waveform	Pure sine wave						
Efficiency	>85%						
<b>Battery Parameters</b>							
Battery Voltage	12V	24V	36V	48V	48V	96V	120V 120V
Backup time	Depends on connected battery and load						
Battery Capacity	Maximum recommended 150AH						
Charging current	Upto 20A			Upto 15A			
<b>Built in Solar Charge Controller</b>							
PV Voltage Vmp Min	17V	17V	34V	34V	51V	68V	68V 125V 125V 150V 150V
PV Voltage Voc Max	60V	60V	90V	90V	150V	180V	180V 300V 300V 300V 300V
PV Power Pmp Max	280W	560W	560W	1120W	1550W	2250W	2250W 2100W 4200W 5250W 8600W
Charging Current	20A	40A	20A	40A	40A	40A	20A 40A 40A 60A
Charge Controller Type	MPPT	MPPT	MPPT	MPPT	MPPT	MPPT	MPPT MPPT MPPT MPPT
Charge Controller Efficiency	>93%	>93%	>93%	>93%	>93%	>93%	>95% >95% >95%
MPPT Tracking Efficiency	>99%	>99%	>99%	>99%	>99%	>99%	>99% >99% >99%
<b>Display and Protection Features</b>							
Overload Protection (Line mode)	>200%, then Mains ON LED blink Continuously			>130%, then Mains ON LED blink Continuously			
Overload Protection (Battery mode)	110% - 150% for 10sec; >150% for 200ms; then PCU Shuts Down			110% - 150% for 10sec; >150% for 200ms; then PCU Shuts Down			
Short Circuit Protection (Line mode)	Fuse			Miniature circuit breaker			
Short Circuit Protection (Line mode)	Electronic Shutdown			Electronic Shutdown			
Transfer time	<40ms (For PCU mode)			<20ms			
Battery/ Input Protection features	Battery Low/ High/ Bad/ Loose connection/ Over Charge, Battery water reminder for battery protection.			Input Low/ High/ Phase reverse, Battery Low, Overload, Over temperature, Short circuit			
Audible alarms	Battery High/ Low Bad, Phase reverse, Overload, Short circuit, Output Bad & Over Temperature. Battery water reminder for Battery protection, Battery loose connection, fuse fail, Plays in different musical tones			Battery low, overload, High Temp, Battery voltage error, SCC charging current error.			
LED indication + 2 line LCD display with Energy generation	LED Display only: Mains ON, INV ON, PV ON, Charged/ Charging, Battery Low, Over Load, INV Fault, SCC Fault, SCC Charging			System Ready, Mains ON, Home UPS ON/Battery Low, Charging/Charged, Over load/Over Temp, SCC charging modes and alarms, Battery voltage and current, Panel voltage, current and power, DC Energy generated Total and Today		System Ready, Mains ON, Home UPS ON/Battery Low, Charging/Charged, Over load/Over Temp, SCC charging modes and alarms, Battery voltage and current, Panel voltage, current and power, DC Energy generated Total and Today	
<b>Environmental and Mechanical specifications</b>							
Audible Noise	Less than 55dBA (at 1M)						
Operating Temperature	0-40° C, 32-104°F						
Relative humidity	0-95% non-condensing						
Enclosure type	Floor Mountable						
Dimension (L x H x D) CM	37 X 18 X 30		22 x 35 x 50			35 x 50 x 56	50 x 80 x 86
Weight (KG)	12Kg	14.5Kg	28Kg	32Kg	50Kg	80Kg	

Specifications subject to change without prior notice.

**swelect**  
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(Formerly known as NUMERIC POWER SYSTEMS LIMITED)

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Accredited as Channel Partner for Off-grid and Decentralized Solar Applications (PV) under JNNISM, Grid Connected Rooftop and Small Solar Power Plants Programme by MNRE  
Empanelled as Energy Service Company with Bureau of Energy Efficiency (BEE)

Toll Free No.  
**1800 425 9600**



RESCO certification



ESCO certification



ISA TECHNOLOGY AWARD



Largest number of Rooftop Installation in year 2016



Softdisk Awards (2016-17)



ISO 9001:2015



ISO 18001:2007



ISO 14001:2015

SHMDV114092017