www.finikelithium.com www.spinoff.in

Helpline: +91 97780-44000, 97787-44000

finike* lithium
the future of excellence.

ADVANCED SOLAR HYBRID INDUSTRIAL / STATIC INVERTER / PCU

INDUSTRIAL SOLUTION
BY SOLAR

CONVENIENCE

Solar Hybrid DSP uses both Solar Power as well as A.C. Mains for charging the battery bank according to priority setting providing the users availability of uninterrupted power supply.

SALIENT FEATURES

- User friendly Wide LCD display for battery user interface.
- Smart Load sharing compatibility.
- Monitoring/data logging feature for better system information at user end (optional)
- Selectable charging current with high charging (HI) and Normal Charging (Low).
- PV availability, battery charging from solar power indication with solar power priority
- User friendly, control and selection switches with LCD indication on front panel
- Protections such as Mains MCB Trip, Overload, Short circuit, Battery low, over temperature indication with buzzer as well as display on LCD available
- Power Saving through No Load Shutdown Feature
- Maximum Solar Power Utilization during charging and backup mode
- PV pole reversal protection indication on LCD
- Deep discharge battery charging from A.C. Mains as well as Solar
- No humming Noise (Silent UPS)
- AC Mains available, battery charging/charged and it voltage indication provided on LCD display
- Duel Modes of operation (EC/SC/NC)
- Grid bypass option available.

CE ISO MADE IN INDIA

2.5KVA | 3 KVA | 3.5 KVA | 5 KVA | 7.5 KVA | 10 KVA

Also Available in **SNMP & GPRS** (Simple Network Management Protocol)

RAJPURA: Nh1, Rajpura-Patiala Road, Rajpura, Punjab
MOHALI: E-226, Ph-8B, SAS Nagar, Mohali
CORPORATE OFFICE: SCO-117/118, Sector-43B, Chandigarh

*A Unit of Spinoff Technopark Ltd.
Cell no: +91 84370-42204 sales@spinoff.in

www.finikelithium.com www.spinoff.in Helpline: +91 97780-44000, 97787-44000

ADVANCED SOLAR HYBRID INDUSTRIAL / STATIC INVERTER / PCU

finike lithium
the future of excellence.

TECHNICAL SPECIFICATIONS HYBRID USP/SPCU

Model name		3KVA 36V/48V	2.5KVA 36V/48V	3.5KVA 48V	5KVA 48V	5KVA 96V	7.5KVA 96V/120V	10KVA 120V	10KVA 192V
System rating (Name Plate)	VA	3000	2500	3500	5000	5000	7500	10000	10000
Full Load Input Current ±2A	Amp	63/48	63/46	63	104	50	75/63	77	48
Operating DC voltage	V	36/48	36/48	48		96	96/120	120	192
PV input									
Input voltage max Voc	Vdc	75/90		75/90		180	180/235		300
Maximum Solar array power	Wp	3000	2500	3500	5000	5000	7500	7500	10000
Max PV modules	Nos	12	10	14	16	20	30	30	40
Modules in series	Nos	3/2	3/2	2	2	4	4/5	5	8
Parallel strings	Nos	4	5	7	8	5	6	6	5
Switching element in SCC						MOSFET			
Type of control						Micro			
Type of solar charger						PWM			
Max current rating of SCC	Adc	50.0	50.0	50.0	70.0	70.0	70/50	70.0	50.0
Efficiency of SCC	%					>90			
Inverter and Battery									
Switching element in Inverter					MOSFET				IGBT
Type of Control						PWM			
Nominal Output voltage in inverter mode	Vac			220V ± 7V				230±7V	
Output supply phases						single			
Nominal Frequency (in inverter mode)	Hz					50 ± 1			
Frequency (Min - Max during Grid by pass) UPS mode	Hz					47-53			
Frequency (Min - Max during Inverter mode	Hz					40-60			
Output voltage regulation	%			195-220				195-230	
Output THD (v) at linear load	%					<5%			
Crest Factor						3:01			
Overload capacity 125%	Sec					6 (6 Retry)			
Overload capacity 150%	Sec					2 (6 Retry)			
Cooling Fan ON at temp	°C		60(or >45%load and Solar >15A)				Continuous Run		
Cooling Fan Off at temp	°C		55 (or <40%load and Solar <10A)				Continuous Run		
Peak efficiency of inverter	%	82	86	89	88	87	88	89	88
Battery low voltage alarm per battery	Vdc					10.8 ± 0.2			
Battery low voltage cut per battery	Vdc					10.5 ± 0.2 (4 Retry)			
Batter low cut recovery per battery through Solar	Vdc					12.7 ± 0.2 (Or mains and Front Switch)			
Max Battery charging voltage by grid per battery	Vdc					14.4±0.2V			
Max Battery charging current by grid in Hi/Lo option	Adc					18±2			
Max Battery charging voltage by Solar per battery	Vdc					14.4±0.2V			
Battery High cut with Alarm per battery	Vdc					14.8±0.2			
Battery High cut Recovery per battery	Vdc					14.3±0.2			
Max Battery charging current by Solar	Adc					20±2			
Max Charging current to battery by Solar+Grid	Adc					20±2			
Grid low cut voltage (IT load/Normal load)	Vac					180/100 ± 10			
Grid low cut voltage recovery (IT load/Normal load)	Vac					190/110 ± 10			
Grid high cut voltage (IT load/Normal load)	Vac					265/280 ± 10			
Grid high cut voltage recovery (IT load/Normal load)	Vac					255/270 ± 10			
Grid charging Enable/Disable						yes			
Selection of UPS Load/Normal Load						Thru switch			
Selection of Operating Mode		QC-Charging current = 20A ±1A Solar + Mains till battery boost voltage with maximum Solar Sharing. Sysyem will not be disconnect Grid in any case EC-Charging current= 20A ±1A Solar + Mains till boost voltage, System will cut off the mains when battery voltage reaches boost voltage level and output load is transferred to Solar + Battery and Grid reconnected <=11.5V per Battery.							
Output Voltage at 100% load at Nominal Battery voltage	Vac			218±5				228±5	
Input current at no load at Nominal Battery voltage	Adc	2.2	2.2	2	2.2	2.2	2	2	2.2
Noise @ 1 meter	dB					<50			
Protections						Batt. Low, Batt. High,Overload, Short circuit,Over temp, PV reverse,MCB Trip/Fuse Trip			
LCD Display parameters		PV Current, Bty voltage, Mains voltage, PCU on-off, UPS Mode on-off, Solar On-off, Load percentage (0 to 150%), Load status (on solar, battery or grid), Charging status, over load, short ckt, fault, battery low, over temp, PV reverse, MCB trip, (Alpha numeric 16x2)							
Operating Temperature range	°C					0-50			
Storage Temperature range	°C					0 +65			
Max RH	%					95			
Front panel details (MCB, Display, Selection switch etc)						Display with Rocker Switch			
Rear panel details (MCB, Terminals etc)						Fan,mcb,rotary,terminal,switch			
Enclosure protection						20			
Changeover time from inverter to mains in UPS mode	ms					<10			
Changeover time from inverter to mains in Normal mode	ms					<10			
Changeover time from mains to inverter in UPS mode	ms					<10			
Changeover time from mains to inverter in Normal mode	ms					<50			
Mains connection				TERMINAL 30A				TERMINAL 60A	
Output				Terminal 30A				TERMINAL 60A	
MCB in battery path						Yes			
Fuse in battery path						NO			
MCB in Solar path						Yes			
Fuse in Solar Path						NO			
TDR (For Compressive Load)			NA				Provided		
Input Protection						Through MCB			
Cabinet						Metal Cabinet			
With Packing LxWxH In MM		470x440x610	470x440x610	470x440x610	470x440x610	500x495x660	600x500x740	600x500x740	600x500x740
Net Weight		38	38	40	52	52	72	92	92
Gross Weight		40	40	42	56	56	76	96	96

Technical Specifications can be changed without prior notice.

RAJPURA: Nh1, Rajpura-Patiala Road, Rajpura, Punjab
MOHALI: E-226, Ph-8B, SAS Nagar, Mohali
CORPORATE OFFICE: SCO-117/118, Sector-43B, Chandigarh

*A Unit of Spinoff Technopark Ltd.
Cell no: +91 84370-42204 sales@spinoff.in