

**TECHNOLOGICAL SMART  
SOLAR INVERTER**

**Advanced DSP SINEWAVE**

**INBUILT LITHIUM POWER  
BACKUP**

**BATTERY LIFE 10-12 YEARS**



## KEY FEATURES

- Range includes all types of Solar Inverters having compatible battery pack
- Sleek in design which will save space
- No maintenance and higher no of years warranty and life of battery
- Battery chargeable by Grid and Solar
- Charging up to 3 times faster than a normal Inverter
- No Acid Fumes, Maintenance free
- Lower power consumption than normal Inverter
- Longer life of battery up to 2000 cycles



## TECHNICAL SPECIFICATIONS

S. No.	Parameter	Unit	Rating				
			L- iON500	L- iON1500	L- iON2500	L- iON3500	L- iON5500
1	Model name (Name Plate)		L- iON500	L- iON1500	L- iON2500	L- iON3500	L- iON5500
2	System rating	VA	300	1000	2000	3000	5000
3	Battery Type (Inbuilt)		Lithium Ion (LFP)				
		AH	18 / 30	60	42 / 54	42	100
4	Full Load Input Current ±2A	Amp	20	63	63	52	80
5	Operating DC voltage	V	12.8	12.8	25.6	51.2	48
6	Input voltage max Voc	Vdc	25	25	45	90	90
7	Maximum Solar array power	Wp	100	660	1340	2680	4000
8	Switching element in SCC		MOSFET				
9	Type of control		Micro				
10	Type of solar charger		PWM				
11	Max current rating of SCC	Adc	10	40.0	50.0	50.0	
12	Efficiency of MPP tracking	%	NA	NA			
13	Efficiency of SCC	%	>90	>90			
14	Switching element in Inverter		MOSFET				
15	Type of Control		PWM				
16	Nominal Output voltage in inverter mode	Vac	220V ± 7V				
17	Output supply phases		single				
18	Nominal Output Frequency of Inverter	Hz	50 ± 1				
19	Frequency (Min - Max during Grid by pass) UPS mode	Hz	47-53				
20	Frequency (Min - Max during Grid by pass) Inverter mode	Hz	40-60				
21	Output voltage regulation	%	180-220				
22	Output THD (v) at linear load	%	<5%				
23	Creast Factor		03:01				
24	Overload capacity 125%	Sec	6 (6 Retry)				
25	Overload capacity 150%	Sec	2 (6 Retry)				
26	Cooling Fan ON at temp	°C	60 (or 45% of rated Load or Solar I>15A)				
27	Cooling Fan Off at temp	°C	55 (or 40% of rated Load or Solar I<15A)				
28	Peak efficiency of inverter	%	< 82				
29	Battery low voltage alarm per battery	Vdc	11.0 ± 0.2				
30	Battery low voltage cut per battery	Vdc	10.8 ± 0.2 (With 4 Retry)				
31	Batter low cut recovery per battery through Solar	Vdc	12.7 ± 0.2 (or Mains or reset switch on front panel)				
32	Max Battery charging voltage by grid	Vdc	14.4 ± 0.2	28.8± 0.4	57.6± 0.8	54± 0.8	
33	Max Battery charging current by grid	Adc	6A±1A	15A±2A	14A±2A	20A±2A	
34	Max Battery charging voltage by Solar per battery	Vdc	14.3 ± 0.2				
35	Battery High cut with Alarm per battery	Vdc	15.0±0.2				
36	Battery High cut Recovery per battery	Vdc	14.6±0.2				
37	Max Battery charging current by Solar	Adc	6A±1A	15±2A	14±2A	20±2A	
38	Max Charging current to battery by Solar+Grid	Adc	12A±1A	15±2A	14±2A	20±2A	
39	Grid low cut voltage (IT load/Normal load)	Vac	180/100 ± 10				
40	Grid low cut voltage recovery (IT load/Normal load)	Vac	190/110 ± 10				
41	Grid high cut voltage (IT load/Normal load)	Vac	265/280 ± 10				
42	Grid high cut voltage recovery (IT load/Normal load)	Vac	255/270 ± 10				
43	Grid charging Enable/Disable		yes				
44	Selection of UPS Load/Normal Load		yes				
45	Selection of Operating Mode		<p>HC-Charging current = 15A ±1A Solar + Mains till battery boost voltage with maximum Solar Sharing. System will not be disconnect Grid in any case</p> <p>EC-Charging current= 15A ±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 &lt;=11.8V/11.2V per Battery(1KVA/2KVA) &amp; 11.5V For 3KVA</p>				
46	Input current at no load at Nominal Battery voltage	Adc	<1	< 2			
47	Noise @ 1 meter	dB	<50	<50			

	Protections		Overload, Battery Deep discharge, Battery Overcharge, Short circuit (1 retry), Battery Hi, PV Reverse, Over Temp, Fuse/ MCB Trip, battery reverse.				
48	LCD Display parameters		LED	PV Current, Battery voltage, Mains voltage, UPS ON/OFF, UPS Mode, Symbol of sun (Smily) if solar available, (non smily symbol in absence of solar), Load percentage (0 to 150%), over load, short ckt, fault, battery low, over temp, PV reverse, Fuse trip, (Customised LCD )		PV Current, Battery voltage, Mains voltage, UPS ON/OFF, UPS Mode, Load percentage (0 to 150%), over load, short ckt, fault, battery low, over temp, PV reverse, Fuse trip, (16X2 LCD )	
49	Indication LEDs		Yes	Tact switch Status		NA	
50	Operating Temperature range	°C	0 -50				
51	Storage Temperature range	°C	0 +65				
	Max RH	%	95				
52	Front panel details (Display, Selection switch etc)		LED with switches	Display with tact switch		Display with switches	
53	Enclosure protection		IP20				
54	Changeover time in UPS mode	ms	<10				
55	Changeover time in Normal mode (Inv mode)	ms	<40				
56	Mains connection		3 core copper cable size 0.75sqmm, 1.5mtr length w/o TOP			Terminal Block 30Amp	
57	Output		3pin Universal socket 13A			Terminal Block 30Amp	
58	MCB in battery path		SWITCH	Yes		Yes	
59	Fuse in Solar Path		Rated Fuse			Rated MCB	
60	Input Protection		FUSE	Resettable Circuit breaker		Rated MCB	
61	Backup @ 400Watt Load	Hrs	1 / 1.45hrs*	2.00 -2.15hrs	3.3-3.45 / 4hrs	5.30-6hrs	10-11hrs
62	Weight without Packing	Kg	8.5	20	32	53	54
63	Dimension (LXWXH) without Packing	mm	330X130X310	405X385X140	445X385X170	410X285X800	495x430x575 *Battery weight and dimension extra (Battery will be separate)



**L-iON 500 12.8V, 18AH/30AH**



**L-iON 1500 12.8V, 60AH**



**L-iON 2500 25.6V, 42AH/54AH**



**L-iON 3500 51.2V, 42AH**



**L-iON 5500 48V, 100AH/200AH**



UNLIMITED POWER

Contact Us:

Livsol Innovations Private Limited  
ML2, F3, Gaur Empire, Sector - 11,  
Vasundhara Ghaziabad,  
Uttar Pradesh - 201012, INDIA

For Customer Queries and Support

Toll Free - 1800 2700 586

Support - +91-9540963311

Enquiries- +91-9971742233

E-mail - [care@livsol.in](mailto:care@livsol.in)

Website - [www.livsol.in](http://www.livsol.in)

