Elson

DSP SINE WAVE HOME UPS & UNDSI SERIES (LKVA-LCD)

- DSP Based Design with absolute and stable Sine Wave output voltage and frequency
- State of the art MOSFET based PWM technology with greater efficiency at lower cost with Dynamic Stability
- Over Temperature Protection
- More back-up being a Sine Wave UPS (ASIC Control)
- Three stage solar charging (TSSC) suitable for all types of battery charging..
- Deep Discharge Battery charging from A.C. Mains.
- User friendly, feather touch control and selection switches with LED indication on front panel.
- Protection such as Mains Fuse Trip, Overload, Short Circuit, Battery low, Over Temperature indication with buzzer as well as display on LCD available.
- AC Mains available, battery charging /charged and its voltage indication provided on LCD display.
- Battery type charging selection (Tubular /Flat /SMF/GEL)
- Grid charging enable /disable options which makes it fully compatible with solar.
- Selectable battery charging current (High /Low).
- Resettable AC circuit breaker which reduce service calls.
- Selectable mode for UPS/Inverter.
- External DC fuse for reverse battery protection.
- Bypass switch in case of any fault
- Comprehensive LCD Display
- Resettable A.C. fuse

APPLICATIONS

- Power Back-up for House hold, Small shops, Small offices etc.
- Small Water pumps and all motor based small applications
- TV Sets, Fans, Tube Lights, computers etc.

300VA | 700VA | 900VA | 1100VA
1600VA | 2100VA |2500VA

Elson

DSP SINE WAVE HOME UPS & UNDSI SERIES (LKVA-LCD)

Technical Specifications

Model Name	Units	ESI 450/915	ESI 1215	ESI 1415	ESI 1600	ESI 2000	ESI 2500	ESI 3000
System rating	VA	300/700	900	1100	1450	1600	2100	2500
Operating DC voltage	Volts	12	12	12	24	24	24	24
Switching element in Inverter		MOSFET						
Type of Control		PWM						
Nominal Output voltage in inverter mode	Vac	220V ± 7V						
Output supply phases		Single						
Nominal Output Frequency of Inverter	Hz	50Hz						
Frequency (Min - Max during Grid by pass) UPS mode	Hz	47-53						
Frequency (Min - Max during Grid by pass) Inverter mode	Hz	40-60						
Output voltage regulation	%	180-220						
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	ºC	60 (or 45% of rated Load)						
Cooling Fan Off at temp	ºC	55 (or 40% of rated Load)						
Battery low voltage alarm per battery	Vdc	10.8 ± 0.2						
Battery low voltage cut per battery	Vdc	10.5 ± 0.1 (With 4 Retry)						
Max Battery charging voltage by grid per battery	Vdc	14.4 ± 0.2 Settable for Tub-14.4V/28.8V, GEL-14.2V/28.4V, SMF-14.2V/28.4, Flat-14.2V/28.4V Settable for Tub-13.8V/27.6V, GEL-13.8V/27.6V, SMF-13.8V/27.6, Flat-13.6V/27.2V						
Max Battery charging current by grid in Hi/Lo option	Adc	16/12 ±2A Settable for Tub-12/16A, GEL-10/16A, SMF-10/14A, Flat-14/10						
Battery High cut with Alarm per battery	Vdc	14.8±0.2						
Battery High cut Recovery per battery	Vdc	14.3±0.2						
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		yes						
Output Voltage at No load at rated Battery voltage	Vac	220						
Noise @ 1 meter	dB	<50						
Protections		Overload, Battery Deep discharge, Battery Overcharge, Short circuit(1retry),Battery Hi,Over Temp,Fuse Trip, battery reverse						
LCD Display parameters		Battery voltage, Mains voltage, UPS ON/OFF, UPS Mode, Load percentage (0 to 110%), over load, short ckt, fault, battery low, over temp,Fuse trip, (Customized LCD)						
Indication LEDs		Tact switch Status						
Operating Temperature range	ºC	0-50						
Storage Temperature range	ºC	0 +65						
Max RH	%	95						
Front panel details (MCB, Display, Selection switch etc)		Display with tact switch						
Rear panel details (MCB, Terminals etc)		O/P socket, fuse/Circuit breaker, mains & batt. Cable and fan, Terminal						
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	<40						
Fuse in battery path		Internal Fuse						
Fuse in Solar Path		Yes						
Grid By pass Manually		Through switch						
Input Protection		Resettable Circuit breaker						
Dimension (LxWxH) in mm		365*345*185	365*345*185	365*345*185	370*345*240	370*345*340	405*350*330	405*350*330
Net Weight		7/8.5	9.5	10	15	17	20	23
Gross Weight		8/9.5	10.5	11	16	17.5	21	24

LENTO INDUSTRIES PVT. LTD. A27, Sector-58, Gautam Budh Nagar, Noida-201301 UP, INDIA. Tel : +91-8527476197 | Email : info@lentoindia.com | www.lentoindia.com