SOLAR ENERGY

SMARTEN®

FUSION IS THE FUTURE

USER MANUAL

RELIABLE POWER. SMARTER FUTURE.



SALIENT FEATURES

- Less No load current
- Battery Charging at very low voltage till 90V
- Compatible with all type of batteries (LA/SMF/TUB/Li-Ion)
- Changeover time less than 10ms (for UPS application)
- Triple protection (Overload, Short Circuit and Wiring Fault)
- SMPS based battery charger increase Battery Life up to 40%
- Great Power Saving upto 30%
- System efficiency more then 88%*
- Backup time is more than 12 to 15%
- Silent operation and Pure Sine Wave Output
- Independent charger feature charge that battery when battery is deep discharged

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निरन्तर पावर, ढुक्कको जीवन।

EverOn
HOME UPS WITH
INBUILT LITHIUM BATTERY

HOME UPS WITH
INBUILT LITHIUM BATTERY
2500VA | 24V

IDEAL FOR HOMES, OFFICES & SHOPS

SUPPORTED LOADS

- LED BULB
- 0,5 HP PUMP
- LED TV
- REFRIGERATOR
- PC
- TUBE LIGHT
- FAN
- JUICER MIXER

The Smarten EverOn Smart Inverter with inbuilt lithium battery is a compact and efficient power backup solution designed for modern homes.

Featuring a 2500VA power output, pure sine wave technology, and a high-performance 2560Wh lithium battery, it delivers reliable and stable power for essential household appliances such as TVs, ceiling fans, LED bulbs, laptops, Wi-Fi routers, and more. With fast charging capability, extended backup time, and a sleek wall-mount design, the Smarten EverOn combines dependable performance, convenience, and advanced technology to provide uninterrupted power whenever you need it.

SMARTEN POWER SYSTEMS LIMITED

PRODUCT SPECIFICATION

Everon 2500

PRODUCT FG CODE

Mains Input mode	
Mains AC low cut UPS mode	175VAC ± 10VAC
Mains AC low cut recovery UPS mode	185VAC ± 10VAC
Mains AC high cut UPS mode	265VAC ± 10VAC
Mains AC high cut recovery UPS mode	255VAC ± 10VAC
Mains AC low cut WUPS mode	90VAC ± 10VAC
Mains AC low cut recovery W.UPS mode	110VAC ± 10VAC
Mains AC high cut WUPS mode	295VAC ± 10VAC
Mains AC high cut recovery W.UPS mode	285VAC ± 10VAC
Input Frequency Range	48Hz to 52Hz
Voltage Output in Mains Mode	Same as input
Frequency Output in Mains Mode	Same as input

Battery	
Battery Type	LI-ION
DC input voltage	24V
Battery Quantity 24V 100Ah Li-ION	1
Boost charging voltage for LI-ION Battery	28V±0.2V
Battery deep Discharge Recovery	Yes (Independent Charger to Recover Deep Discharge Battery)
Charging Current at LI-ION Battery	20A±2 AMP
Battery Capacity**	100Ah

Safety	
HV Test Input to Earth	Leakage current <5mA when 1.5kV applied for 1 min
HV Test Output to Earth	Leakage current <5mA when 1.5kV applied for 1 min

Weight and Dimensions	
Dimensions in mm	—
Weight (Kg)	—

Backup Mode	
Output voltage	220VAC +5% -10% (until battery low alarm)
Output frequency	50Hz ± 0.2 Hz
Output waveform	Pure Sine Wave ≤ 5% THD
Discharging current @ full load	72 ±3A
Low Battery Warning	21.6V±0.2V
Low Battery Cut	20.8V±0.2V
Change over time UPS mode	< 10msec
Change over time WUPS mode	< 25msec

Protections	
Overload in backup mode	Yes provided, system will indicate on display at 101% load
Short Circuit in Backup Mode	System will shutdown after 3 - retries in case of output short circuit
Short Circuit in Mains Mode	Mains MCB will trip
Back feed	System will shutdown in case of back feed and there is no retry
Over temperature	Yes provided, if heat sink temperature goes above 100°C System will shut down
Reverse Battery	DC fuse will blown
Phase to Phase protection in mains mode	Yes provided by electronic
Battery High Protection	Yes provided by Firmware

Display and Alarms	
LCD Initial Display	Welcome to smarten world, System Capacity, Charging Till 90VAC and Deep Discharge Battery, System Setting, UPS / WUPS mode, I/P range 90-295VAC / 170-265VAC, Battery Type Selected LA / SMF / Tubular/ LI-ION, Battery Capacity Selected 100-135Ah / 150-200Ah,
LCD Status Display	Mains ON, Input Voltage, Input Frequency, Battery Voltage, Battery Charging, Battery Charged, Charging Current, Backup Mode, UPS ON, UPS OFF, Battery Voltage, Load %, Output Voltage, Output Frequency, Mains Low Cut, Mains High Cut, Mains Not Available, Mains Frequency Cut
Buzzer	Audible beep for Overload, Short Circuit, Back feed, Low Battery, Over Temperature, Mains Fuse blown / MCB Trip

* This option is enabled only for the LA/SMF/TUB batteries

** This optioin is enabled only for the Li-on Batteries

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OUR PRODUCT RANGE

BRAVO PURE SINE WAVE HOME UPS	Superb MPPT SOLAR POWER CONDITIONING UNIT	NOVA PURE SINE WAVE HOME UPS	ULTRA MPPT HYBRID SOLAR PCU	LI-ION POWER LI-ION BATTERY	BRAVO/SAVER TUBULAR BATTERY

HOME UPS | SOLAR PCU (MPPT BASED) | NOVA SERIES HOME UPS | LITHIUM ION BATTERY | TUBULAR BATTERY | TEJAS DC MPPT SOLAR PCU | EV CHARGER | EV CHARGER/ TEJAS DC SOLAR SOLUTION | DC CABLES | ULTRA MPPT OFF GRID SOLAR PCU

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