

LS600X Series Microinverters



LS600X™ Series Microinverters

The LeadSolar LS600X™ microinverters optimize both residential and commercial solar PV projects by delivering increased energy harvest, while offering maximum flexibility in panel deployment. With its all-AC approach, integrated grounding, self-contained bus cable, and ability to support 96 cell modules on 30A branch circuits, the LS600X™ simplifies both design and installation. Coupled with the Digi™ communication gateway and LinkView™ monitoring software, the LS600X™ can form the backbone of a superior solution for your PV projects.

☒ Performance

- Maximizes energy production over life of system
- Minimizes losses due to shading, dust, and debris
- Eliminates single point of module failure

↻ Versatility

- Supports most 96 cell panels.
- Zigbee communication protocol
- Allows for variable module placement
- Supports 30A branch circuits

✂ Simplicity

- All AC design – No string calculations
- No GEC needed for microinverters
- Easy installation with integrated cable

⚡ Reliability & Safety

- Highly robust NEMA 6 construction
- Industry-leading warranty, up to 25 years
- NEC 2014 rapid shutdown compliant
- CA Rule 21 (UL 1741 SA) compliant
- AC branch circuits will not support arc faults



INPUT DATA (DC)		LS600X-240-Z
Recommended module power (STC)		330 – 400+ W
Module compatibility		Two 96 cell panels
Maximum input voltage		80V
MPPT voltage range (Full Power)		50 - 70V
Min/Max start voltage		27 - 50V
Operating voltage range		45 - 75V
Maximum DC short circuit current		30A (15 A per MPPT)
Maximum input current		14.6A (7.3 A per MPPT)
OUTPUT DATA (AC)		240 V
Peak power		700W
Maximum continuous output power		700W
Maximum continuous output current ⁴		2.66A /2.4A
Nominal voltage ¹		240V
Nominal operating voltage range ²		211 - 264V
Over/under voltage trip time		OVP(110%, 13s), UVP(88%, 21s)
Nominal operating frequency		60Hz
Nominal operating frequency range ¹		59.3 - 60.5 Hz
Over/under voltage trip time		OFP(60.5Hz, 300s), UFP(58.5Hz, 300s)
Power factor		>0.95 (±0.8 adjustable)
Maximum units per 30A branch circuit ⁴		9 /10
Standby power consumption		<300mW
EFFICIENCY		
Peak inverter efficiency		96.5%
CEC weighted efficiency		96%
Static MPPT efficiency		99.4%
Power factor		>.95 (±0.8 adjustable)
Total harmonic distortion		< 4%
MECHANICAL DATA		
Operating ambient temp range		-40°C to 65°C (-40°F to 131°F)
Dimensions (W x H x D) ³		27.6cm x 24cm x 4.9cm (10.9in x 9.4in x 1.9in)
Weight		4.2kg (9.3lbs)
Cooling		Convection (no fan required)
Enclosure environmental rating		NEMA 6
OTHER FEATURES		
Communication		Zigbee
Monitoring		Digi Gateway- Supports Ethernet/WiFi connection to router or cellular
Protect function		Overload, short circuit, over/under voltage, over temperature
Integrated grounding		Meets NEC 690.35 - Ground Fault Protection internal to microinverter
Compliance		IEC 61727, IEC 62116, IEC/EN 62109-1 & -2, AS4777.2 & .3, AS/NZ 3100, UL 1741 SA/IEEE 1547, FCC Part 15B, CAN/CSA-C22.2 NO.0-M91, 0.4-04 and 107.1-01, G83/G59, NBT 32004, CA Rule 21 (UL 1741-SA)

1. 208 & 277V versions also available
2. Can be extended to conform to non-standard utility requirements
3. Excluding mounting bracket
4. Factory-set current limits allow for larger branch circuits

LeadSolar Energy, Inc.