

Data Sheet

LS600 Series Microinverters

The **LeadSolar LS600 Microinverter™** optimizes 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 dual 60-cell or 72-cell modules, the LS600 simplifies both design and installation. Coupled with LeadSolar's communication Link Gateway™, monitoring software, and smart junction box, the LS600 forms the backbone of a complete solution for your PV projects.

Benefits

Performance

- Maximizes energy production
- Minimizes loss due to shading, dust, and debris
- Eliminates single point of module failure
- Cost effective duo design and installation

Versatility

- Supports both 60 and 72 cell modules
- Available in 240V, 208V or 277V versions
- Allows for greater flexibility of module placement
- PLC or ZigBee communication

Simplicity

- All AC design - No string calculation required
- No GEC needed
- Easy installation with integrated cable

Reliability & Safety

- Highly robust NEMA 4 construction
- Industry-leading warranty, up to 25 years
- NEC 2014 rapid shutdown compliant
- AC branch circuits will not support arc faults



ISO 9001: 2008

INPUT DATA (DC)	LS-600-240	LS-600-208	LS-600-277
Recommended module power (STC)	230 - 350+ W		
Module compatibility	Two 60 or 72 cell panels		
Maximum input voltage	60V		
MPPT voltage range (Full Power)	27 - 45V		36 - 45V
Min/Max start voltage	27 - 45V		36 - 45V
Operating voltage range	22 - 55V		22 - 55V
Maximum DC short circuit current	30A (15 A per MPPT)		
Maximum input current	19.4A (9.7 A per MPPT)		
OUTPUT DATA (AC)	240 V	208 V	277V
Peak power	600W	600W	600W
Maximum continuous output power	500W	500W	600W
Maximum output current	2.00 A	2.88 A	2.17 A
Nominal voltage	240 V	208 V	277 V
Nominal operating voltage range ¹	211 – 264 V	183 -229 V	244 -305 V
Nominal operating frequency	60 Hz		
Nominal operating frequency range ¹	59.3 - 60.5 Hz		
Maximum units per 15A branch circuit	6	-	-
Maximum units per 20A branch circuit	8	5	7
Standby power consumption	<100 mW		
EFFICIENCY			
Peak inverter efficiency	96.00%		96.20%
CEC weighted efficiency	95.50%		96%
Static MPPT efficiency	99.40%		99.40%
Power factor	>.95		
Total harmonic distortion	< 4%		
MECHANICAL DATA			
Operating ambient temp range	-40°C to 65°C (-40°F to 149°F)		
Dimensions (W x H x D) ³	26cm x 18cm x 3.1cm (10.2in x 7.1in x 1.2in)		
Weight	3.5Kg (7.7lbs)		
Cooling	Convection (no fan required)		
Enclosure environmental rating	NEMA 4		
OTHER FEATURES			
Communication	PLC ⁴ or ZigBee	PLC ⁴ or ZigBee	PLC ⁴ or ZigBee
Monitoring	Lead Link™- 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/IEEE 1547, FCC Part 15B, CAN/CSA-C22.2 NO.0-M91, 0.4-04 and 107.1-01, G83/G59, NBT 32004		

1. Can be extended to conform to non-standard utility requirements
2. Configured for standard or premium, depending on panel STC rating
3. Excluding mounting bracket
4. 132 kHz primary, 115 kHz secondary