

# LS1400 Series Microinverters



## LS1400™ Series Microinverters

The LeadSolar LS1400™ series of microinverters optimizes 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 60, 72 or 96 cell modules on 30A branch circuits, the LS1400™ simplifies both design and installation. Coupled with the Digi™ communication Gateway and the LinkView™ monitoring software, the LS1400™ forms the backbone of a complete 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
- Cost effective quad design and installation

### ↻ Versatility

- Supports most 60, 72 or 96 cell panels
- Available in 240V, 208V, or 277V
- 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 and Rule21 compliant
- AC branch circuits will not support arc faults



# LS1400™

INPUT DATA (DC)	LS1400-240-Z	LS1400-208-Z	LS1400-277-Z
Recommended module power (STC)		230 – 400 W	
Module compatibility		four 60 or 72 cell panels <sup>1</sup>	
Maximum input voltage		60V	
MPPT voltage range (Full Power)		32 - 45V	
Operating voltage range		22 - 55V	
Number of MPPT		4	
Maximum DC short circuit current		60A (15 A per MPPT)	
Maximum input current		40A (10 A per MPPT)	
OUTPUT DATA (AC)	240 V	208 V	277V
Peak power	1400	1400	1400
Maximum continuous output power	1200-1400W	1200-1400W	1200-1400W
Maximum continuous output current	5.00 - 5.83A	5.77 - 6.73A	4.33 - 5.05A
Nominal voltage	240V	208V	277V
Nominal operating voltage range <sup>2</sup>	212 - 264V	184 - 228V	244 - 305V
Nominal operating frequency		60Hz	
Nominal operating frequency range <sup>2</sup>		59.3 - 60.5 Hz	
Maximum units per 30A branch circuit		4	
Power factor		>.99 (±0.8 adjustable)	
Maximum output overcurrent protection (AC)		15A	
EFFICIENCY			
Peak inverter efficiency		95.00%	
CEC weighted efficiency		94.50%	
Static MPPT efficiency		99.90%	
Power factor		>.95	
Total harmonic distortion		< 3%	
MECHANICAL DATA			
Operating ambient temp range		-25°C to 60°C (-13°F to 140°F)	
Dimensions ( W x H x D) <sup>3</sup>		32.2 cm x 27.8 cm x 6.1 cm (12.7 in x 10.9 in x 2.4 in)	
Weight		7.5 Kg (16.5 lbs)	
Cooling		Convection (no fan required)	
Enclosure environmental rating		NEMA 6	
OTHER FEATURES			
Communication	Zigbee	Zigbee	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 SA/IEEE 1547, FCC Part 15B, CAN/CSA-C22.2 NO.0-M91, 0.4-04 and 107.1-01, G83/G59, NBT 32004		

1. 96 cell version also available
2. Can be extended to conform to non-standard utility requirements
3. Excluding mounting bracket, 12.8”(32.5cm) with bracket

## LeadSolar Energy, Inc.