

LS1400 Series Microinverters



LS1400™ Series Microinverters

LeadSolar The LS1400™ series 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, contained bus cable, and ability to support 60 or 72 cell modules on 30A branch circuits, the LS1400™ simplifies both design and installation. Coupled with the Digi™ communication Gateway and the LinkView™ monitoring software, LS1400™ forms the backbone of complete solution for your PV projects.

Performance

- Maximizes energy production over life of system
- Minimizes loses due to shading, dust, and debris
- Eliminates single point of module failure
- Cost effective quad design and installation

() Versatility

- Supports most 60 or 72 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











LS1400X Datasheet for

96-cell





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 ¹ | | |
| 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 continous 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 ² | 212 - 264V | 184 -228V | 244 -305V |
| Nominal operating frequency | 60Hz | | |
| Nominal operating frequency range ² | 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 ³ | -25°C to 60°C (-13°F to 140°F) | | |
| Dimensions ($W \times H \times D$) ⁴ | 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 | | |
| Monitoring | Lead Link™- Supports Ethernet/WiFi connection to router or cellular | | |
| Protect function | Overload, short circuit, over/under voltage, over temperature | | |
| | Meets NEC 690.35 - Ground Fault Protection internal to | | |
| Integrated grounding | 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 | | |
| | 1V171, U.T-UT AITU 1U | 7.1-01, GOS/GS7, NOT 3200° | T . |

- 1. 96 cell version also available
- 2. Can be extended to conform to non-standard utility requirements
- 3. Full performance-operational down to -35°C
- 4. Excluding mounting bracket, 12.8"(32.5cm) with bracket

LeadSolar Energy, Inc.



