SUNPOWER®

SPR-A5 Microinverter

The high-powered smart grid ready SPR-A5 Microinverter with integrated MC4 connectors dramatically simplifies the installation process while achieving the highest system efficiency.

The SPR-A5 Microinverter extends the reliability standards set forth by previous generations with over a million hours of power-on testing, enabling an industry-leading warranty of up to 25 years.

Easy to Install

- Lightweight and simple.
- Faster installation with improved built-in connectors and two-wire cabling.
- Built-in rapid shutdown compliance (NEC 2014, 2017, and 2020).

Efficient and Reliable

- Optimized for high-powered residential modules.
- Highest CEC efficiency of 97.0%.
- More than a million hours of testing.
- Class II double-insulated NEMA 6 enclosure.
- Natural convection cooling without fans.

Smart Grid Ready

- Complies with advanced grid support, voltage, and frequency ride-through requirements.
- Remotely updates to respond to changing grid requirements.
- Configurable for varying grid profiles.
- Meets CA Rule 21 (UL 1741-SA and IEEE 1547:2018 (UL 1741-SB).

Complete Confidence Warranty

- SunPower Complete Confidence Warranty guarantees performance of up to 25 years.
- Labor, shipping, and parts all included.
- One company stands behind the entire SunPower Equinox® system, one company to call.

SPR-A5 Microinverter

DC Electrical Data	
SunPower Module Compatibility	A-Series, M-Series, U-Series
Maximum Input DC Voltage	59 V
Peak Power Tracking Voltage	38 V–43 V
Operating Range	20 V–59 V
Min./Max. Start Voltage	30 V / 59 V
Maximum DC Short Circuit Current (module Isc)	15 A
Overvoltage Class DC Port	II
DC Port Backfeed Current	0 A
Array Configuration	1 × 1 ungrounded array[1]

AC Electrical Data		
	@240 VAC	**@208 VAC**
Peak Output Power	384 VA	369 VA
Maximum Continuous Output Power	384 VA	369 VA
Nominal (L–L) Voltage/Range[2]	240 V / 211–264 V	208 V / 183–229 V
Maximum Continuous Output Current	1.60 A (240 V)	1.77 A (208 V)
Nominal Frequency	60 Hz	60 Hz
Extended Frequency Range	47–68 Hz	47–68 Hz
AC Short Circuit Fault Current Over 3 Cycles	4.82 A	4.82 A
Maximum Units per 20 A (L–L) Branch Circuit[3]	10	9
Overvoltage Class AC Port	III	III
AC Port Backfeed Current	18 mA	18 mA
Power Factor Setting	1.0	1.0
Power Factor (adjustable)	0.85 leading / 0.85 lagging	0.85 leading / 0.85 lagging
CEC Weighted Efficiency	97.0%	96.5%

Mechanical Data	
Ambient Temperature Range	–40°C to 60°C
Relative Humidity Range	4% –100% (condensing)
Connector Type	Staübli MC4
DImensions (W x H x D)	8.4" × 6.9" × 1.2" (without bracket) (212 mm × 175 mm × 30.2mm)
Weight	2.38 lb (1.08 kg)
Cooling	Natural convection – no fans
Approved for Wet Locations	Yes
Pollution Degree	PD3
Enclosure	Class II, corrosion resistent polymeric enclosure
Environmental Category / UV Exposure Rating	NEMA type 6 / outdoor
Altitude	6561 ft (2000 m)

Features	
Communication	Power Line Communication (PLC)
Disconnecting Means	The AC and DC connectors have been evaluated and approved by UL for use as the load-break disconnect means required by NEC 690 and C22.1-2018 Rule 64-220.
Compliance	• CA Rule 21 (UL 1741-SA) • IEEE 1547:2018 (UL 1741-SB) • HECO v1.1 • UL 62109-1 • UL1741 / IEEE1547 • FCC Part 15 Class B • ICES-0003 Class B • CAN/CSA-C22.2 NO. 107.1-01 This product is UL Listed as PV Rapid Shutdown Equipment and conforms with NEC 2014, 2017, and 2020 Article 690.12 and C22.1-2015 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors, when installed according to manufacturer's instructions.

1 No additional DC protection required; AC protection requires maximum 20 A per branch circuit.
2 Nominal voltage range can be extended beyond nominal if required by the utility.
3 Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

See www.sunpower.com/company for more reference information.
Specifications included in this datasheet are subject to change without notice.

Please read the safety and installation instructions for details.

UL LISTED PERMANENTLY-CONNECTED GRID SUPPORT INVERTER PV RAPID SHUTDOWN EQUIPMENT E314937

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