



Leading the Industry in
Solar Microinverter Technology



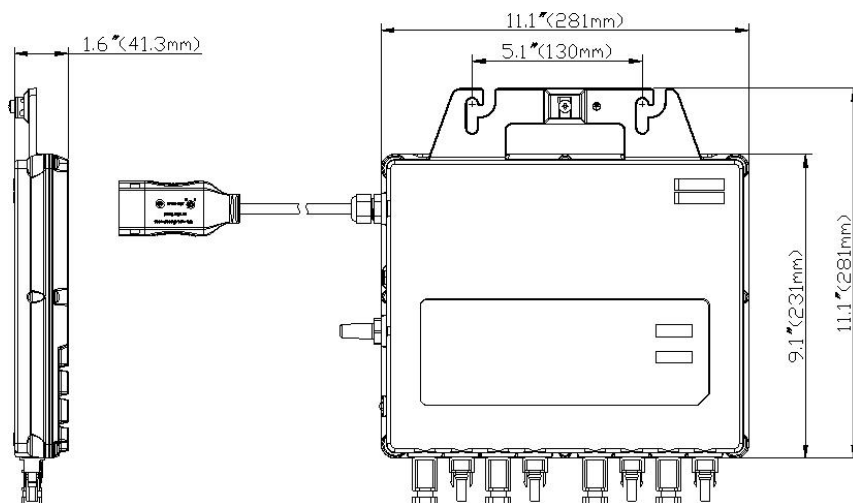
QS1

- Quad module microinverter with independent MPPT
- Maximum continuous output power up to 1,200W
- Wide MPPT voltage range (22V-48V)
- Accommodates modules up to 440W
- Meets NEC 2014/2017 690.12 Rapid Shutdown requirements
- Zigbee communication and online monitoring

APsystems breaks new ground once again with the QS1, a cutting edge microinverter design accommodating up to four high-capacity PV modules up to 450W+ with independent MPPT. A single-phase, smart grid-compliant microinverter, the QS1 features Zigbee wireless communication over a mesh network with faster data speeds than PLC, and a wide MPPT voltage range results in a greater energy harvest for homeowners.

A true utility-interactive microinverter with Reactive Power Control (RPC) technology, the QS1 is inherently NEC 690.12 2014/2017 Rapid Shutdown compliant. The unit also builds on the successful APsystems line of multi-module microinverters, simplifying installation and reducing costs.

DIMENSIONS:



APsystems QS1 Microinverter Datasheet

INPUT DATA (DC)

| | |
|-----------------------------------|-------------------------|
| Module Compatibility | 60 + 72 Cell PV Modules |
| MPPT Voltage Range | 22V-48V |
| Operation Voltage Range | 16V-55V |
| Maximum Input Voltage | 60V |
| Startup Voltage | 20V |
| Maximum Input Current | 12A x 4 |
| Maximum DC short circuit current | 15A x 4 |
| Recommended PV Module Input Power | 440W |

OUTPUT DATA (AC)

| | 240V | 208V |
|---------------------------------|--------------------|-------------------|
| Maximum Continuous Output Power | 1,200W | 1,100W |
| Nominal Output Voltage/Range | 240V/211V-264V | 208V/183V-229V |
| Nominal Output Current | 5.00A | 5.29A |
| Nominal Output Frequency/Range | 60Hz/59.3Hz-60.5Hz | |
| Power Factor | >0.99 | |
| Total Harmonic Distortion | <3% | |
| Maximum units per branch | 3 (12 PV modules) | 3 (12 PV modules) |

EFFICIENCY

| | |
|-------------------------|-------|
| Peak Efficiency | 96.5% |
| Nominal MPPT Efficiency | 99.5% |
| Night Power Consumption | 30mW |

MECHANICAL DATA

| | |
|-------------------------------------|---|
| Operating Ambient Temperature Range | -40°F to +149°F(-40°C to +65°C) |
| Storage Temperature Range | -40°F to +185°F(-40°C to +85°C) |
| Dimensions (W x H x D) | 11.1" x 9.1" x 1.6"(281mm x 231mm x 41.3mm) |
| Weight | 9.9lbs (4.5kg) |
| AC Trunk Cable Maximum Current | 20A |
| Enclosure Rating | NEMA 6 |
| Cooling | Natural Convection - No Fans |

FEATURES

| | |
|--------------------|--|
| Communication | Wireless (Zigbee) |
| Transformer Design | High Frequency Transformers, Galvanically Isolated |
| Monitoring | Via EMA* Online Portal |
| Warranty | 10 years standard, extendable to 25 years |

CERTIFICATE & COMPLIANCE

| | |
|----------------------------|---|
| Safety and EMC Compliance | FCC Part15; ANSIC63.4; ICES-003 |
| Certificate & Compliance | UL1741**, CSAC22.2No.107.1-01 UL 1741 SA/Rule 21 compliant (240V version only) |
| Grid Connection Compliance | IEEE1547 |
| Rapid Shutdown | Meets NEC 2014/2017 690.12 |



** Meets the standard requirements for Distributed Energy Resources (UL 1741) and identified with the CSA Listed Mark.

Specifications subject to change without notice – please ensure you are using the most recent update found at www.APsystems.com

