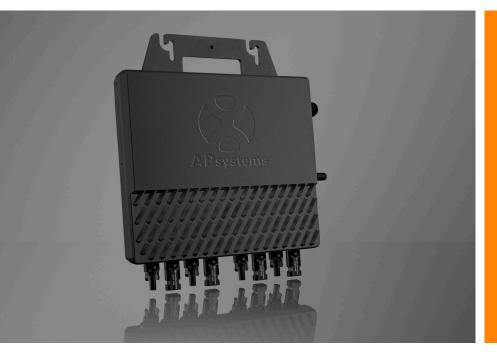


## Leading the Industry in **Solar Microinverter Technology**

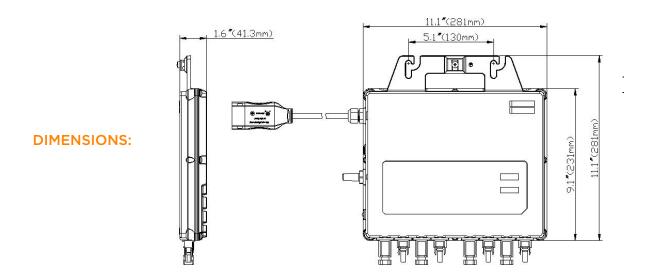


# QS1

- Four-PV module microinverter with four independent MPPT
- Maximum continuous output power up to 1,200W
- Wide MPPT voltage range (22V-48V)
- Accommodates modules up to 375W
- Meets NEC 2017 690.12 Rapid Shutdown requirements
- Zigbee communication

APsystems breaks new ground once again with the QS1, a cutting edge microinverter design accommodating up to four high-capacity PV modules up to 375W+ 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.



### **APsystems QS1 Microinverter Datasheet**

#### INPUT DATA (DC)

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

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  $\,$ 

