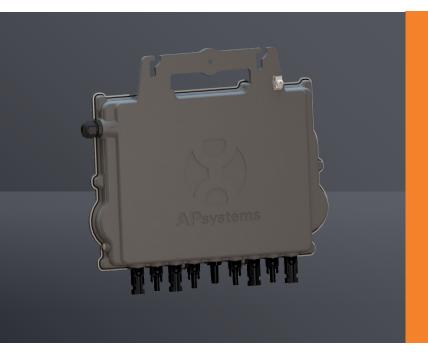


# Leading the Industry in **Solar Microinverter Technology**



### QT2

## The most powerful 3-phase **Quad microinverter**

- Designed for 3-phase grid connection (208V or 480V)
- Single unit connects to 4 modules, 2 MPPTs, module-level DC voltage
- Maximum continuous AC output power 1728VA @ 208V, 1800VA @ 480V
- Engineered to harness today's high-capacity PV modules (Maximum input current 20A)
- Integrated safety protection relay
- Adjustable power factor
- Balancing 3-phase output
- Compatible with both △ and Y 3-phase grid

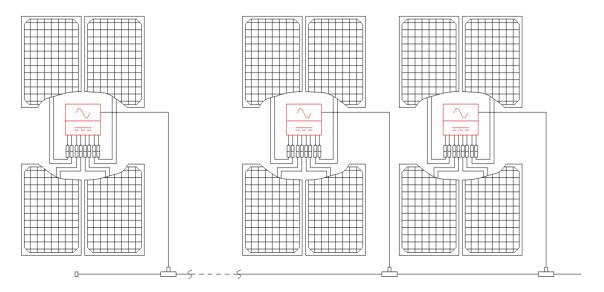
#### **PRODUCT FEATURES**

APsystems introduces its 2nd generation of native 3-phase quad microinverters, reaching unprecedented power outputs of 1728VA (for 208V) and 1800VA (for 480V) to harness the power of today's high-output PV modules. The QT2 microinverter gives commercial installers a powerful plug-and-play MLPE inverter that installs faster than competing solutions and is inherently compliant to rapid shutdown requirements.

With balancing 3-phase output, 4 DC inputs and encrypted ZigBee wireless, installers and system owners alike benefit from new QT2 architecture platform. The innovative design facilitates thermal dissipation while maximizing power production. The components are encapsulated with silicone to reduce stress on the electronics, dissipate heat, enhance waterproof properties, and ensure maximum reliability of the system. 24/7 access to performance data through apps or APsystems EMA web-based portal facilitate remote diagnosis and troubleshooting.

The new QT2 is grid interactive through its Reactive Power Control (RPC) feature, designed to better manage photovoltaic power spikes in the grid. At 96.5% peak efficiency and improved reliability, the QT2 is a game changer for commercial solar.

#### WIRING SCHEMATIC



### **Datasheet | QT2 3-Phase Microinverter**

Model

Model	Q12-208	Q12-480	
Region	USA/	'Canada	
Input Data (DC)			
Recommended PV Module Power (STC) Range	315Wp-670Wp+		
Peak Power Tracking Voltage	30'	30V-45V	
Operating Voltage Range	26\	26V-60V	
Maximum Input Voltage	6	60V	
Maximum Input Current	20	20A x 4	
Maximum input short circuit current	25A r	per input	
Output Data (AC)			
Maximum Continuous Output Power	1728VA	1800VA	
Nominal Output Voltage/Range <sup>(1)</sup>	208V/183V-229V	480V/422V-528V	
Adjustable Output Voltage Range	166V-240V	385V-552V	
Nominal Output Current	4.8Ax3	2.17Ax3	
Maximum Output Fault Current (ac) And Duration	L-L:85.4Apk, 13.6ms of duration, 4.967Arms	L-L:35.1Apk, 13.9ms of duration, 2.199Arms	
Nominal Output Frequency/Range <sup>(1)</sup>	60Hz/58.8Hz-61.2h	Hz(HECO:57Hz-63Hz)	
Adjustable Output Frequency Range	55H	55Hz-65Hz	
Power Factor(Default/Adjustable)	0.99/0.8 leading0.8 lagging		
Maximum Units per 30A branch <sup>(2)</sup>	5	11	
AC Bus Cable	10	10AWG	
Efficiency			
Peak Efficiency	96	96.5%	
CEC Efficiency	96%	95.5%	
Nominal MPPT Efficiency	99	99.5%	
Night Power Consumption	80mW	200mW	
Mechanical Data			
Operating Ambient Temperature Range <sup>(3)</sup>	-40 °F to +149 °F	-40 °F to +149 °F (-40 °C to +65 °C)	
Storage Temperature Range	-40 °F to +185 °F	-40 °F to +185 °F (-40 °C to +85 °C )	
Dimensions (W x H x D)	14" × 9.5" × 1.8" (359r	14" × 9.5" × 1.8" (359mm X 242mm X 46mm)	
Weight	13 lb	13 lbs (6kg)	
DC Connector Type	Stäubli MC4 PV-A	Stäubli MC4 PV-ADBP4-S2&ADSP4-S2	
Cooling	Natural Conv	Natural Convection - No Fans	
Enclosure Environmental Rating	Ту	Type 6	
Features			
Communication (Inverter To ECU) <sup>(4)</sup>	Encrypt	Encrypted ZigBee	
Isolation Design	High Frequency Transfor	High Frequency Transformers, Galvanically Isolated	
Energy Management	Energy Management	Energy Management Analysis (EMA) system	
Warranty <sup>(5)</sup>	10 Years Standard	d ; 25 Years Optional	
Compliances			
Safety, EMC & Grid Compliances	IEEE1547; Rule 21; SRD-\ NEC2014&NEC2017&NEC20 circuit Protection; NEC2014	UL1741; CSA C22.2 No. 107.1-16; UL1741SA; UL1741SB; IEEE1547; Rule 21; SRD-V2.0; FCC Part15; ICES-003; NEC2014&NEC2017&NEC2020 Section 690.11 DC Arc-Fault circuit Protection; NEC2014&NEC2020 Section 690.12 Papid Shutdown of PV systems on Buildings	

QT2-208

QT2-480

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Specifications subject to change without notice please ensure you are using the most recent update found at <u>usa.APsystems.com</u> or <u>canada.APsystems.com</u>



690.12 Rapid Shutdown of PV systems on Buildings

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

<sup>(1)</sup> Nominal voltage/frequency range can be extended beyond nominal if required by the utility. (2) Limits may vary. Refer to local requirements to define the number of microinverters per branch in period 2020.

<sup>(3)</sup> The inverter may enter to power de-grade mode under poor ventilation and heat dissipation installation environment.

<sup>(4)</sup> Recommend no more than 80 inverters register to one ECU for stable communication.
(5) To be eligible for the warranty, APsystems microinverters need to be monitored via the EMA portal. Please refer to our warranty T&Cs available on <u>usa.APsystems.com</u>.