

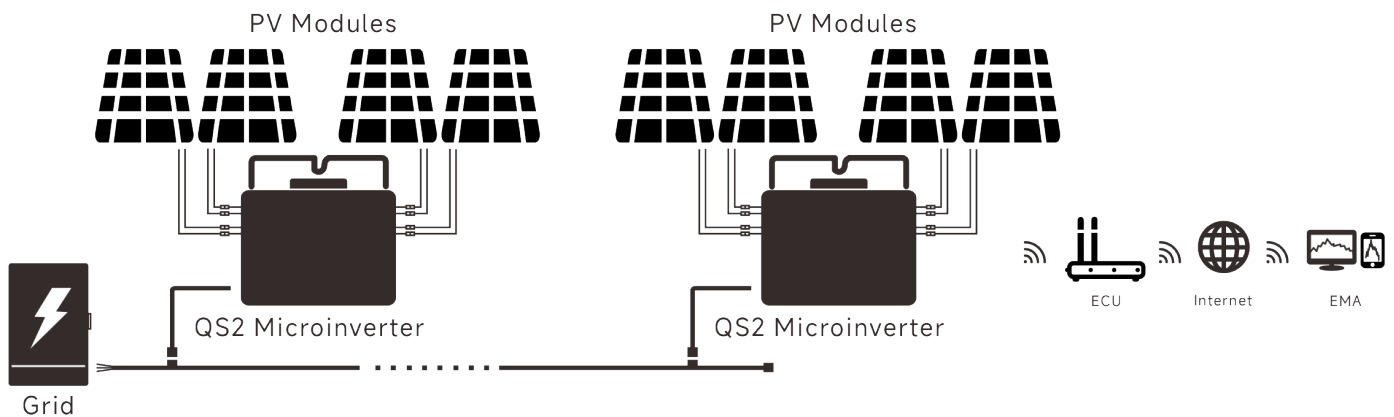


# QS2

## Single-phase Quad Microinverter

- 2200VA designed for high Power PV modules
- 2<sup>nd</sup> generation platform with encrypted zigbee
- 4 independent MPPTs
- Compatible with DS3 & QS1

### WIRING SCHEMATIC



### Features

#### High productivity

- Optimized for the latest high-powered PV modules
- Maximum continuous output power up to 2200VA
- 99.5% MPPT Efficiency, 96% Peak Efficiency

#### Smart Design

- Single unit connects to 4 modules
- 4 input channels with independent MPPT and monitoring function
- Encrypted wireless communication
- Compatible with our DS3 series to maximize flexibility and cost-efficiency
- For residential and commercial rooftops

#### Proven Safety

- 60V low DC voltage, complying with Rapid shutdown requirement by design
- Safety protection relay integrated
- High frequency transformers, and Galvanically isolated design
- Multiple grounding solutions including grounding wire/lug/washer

#### High Reliability

- Encapsulated with silicone to reduce stress on electronics, facilitate thermal dissipation, IP67 rating
- Rigorous testing including accelerated life testing

# Datasheet | QS2 Microinverter

|               |      |
|---------------|------|
| <b>Model</b>  | QS2  |
| <b>Region</b> | EMEA |

## Input Data (DC)

|                             |         |
|-----------------------------|---------|
| Peak Power Tracking Voltage | 28V-48V |
| Operating Voltage Range     | 26V-60V |
| Maximum Input Voltage       | 60V     |
| Maximum Input Current       | 20A x 4 |
| Isc PV                      | 25A x 4 |

## Output Data (AC)

|  |                                |
|--|--------------------------------|
| Maximum Continuous Output Power                                  | 2200VA                         |
| Nominal Output Voltage/Range <sup>(1)</sup>                      | 230V/184V-264V                 |
| Nominal Output Current   | 9.6A                           |
| Nominal Output Frequency/ Range <sup>(1)</sup>                   | 50Hz/48Hz-52Hz                 |
| Power Factor(Default/Adjustable)                                 | 0.99/0.9 leading...0.9 lagging |
| Maximum Units per 2.5mm <sup>2</sup> AC Bus Cable <sup>(2)</sup> | 2                              |
| Maximum Units per 4mm <sup>2</sup> AC Bus Cable <sup>(2)</sup>   | 3                              |
| Zigbee Frequency Range   | 2405MHz - 2480MHz              |
| Zigbee Maximum Power (EIRP)                                      | 9.97 dBm                       |

## Efficiency

|                         |        |
|-------------------------|--------|
| Peak Efficiency         | 96.00% |
| Nominal MPPT Efficiency | 99.50% |
| Night Power Consumption | 20mW   |

## Mechanical Data

|  |  |
|--|--|
| Operating Ambient Temperature Range <sup>(3)</sup> | - 40 °C to + 65 °C                                     |
| Storage Temperature Range                          | - 40 °C to + 85 °C                                     |
| Dimensions (W x H x D)                             | 365mm×272mm×40.6mm                                     |
| Weight   | 6.6kg  |
| DC Connector Type                                  | Stäubli MC4 PV-KBT4&KST4                               |
| Cooling  | Natural Convection - No Fans                           |
| Enclosure Environmental Rating                     | IP67   |
| Pollution Degree Classification                    | PD3  |
| Operate Relative Humidity Range                    | 4%-100%  |
| Maximum Altitude                                   | <2000m   |
| Overvoltage Category                               | OVC II For PV Input Circuit, OVC III For Mains Circuit |
| Warranty   | 12 Years Standard ; 25 Years Optional                  |

## Features

|  |  |
|--|--|
| Communication (Inverter To ECU) <sup>(4)</sup> | Encrypted ZigBee                                   |
| Isolation Design                               | High Frequency Transformers, Galvanically Isolated |
| Energy Management                              | EMA web portal, EMA Manager, EMA APP               |

## Compliance

|                                |   |
|--------------------------------|---|
| Safety, EMC & Grid Compliances | EN 62109-1; EN 62109-2; EN IEC 61000-6-1; EN IEC 61000-6-2; EN IEC 61000-6-3; EN IEC 61000-6-4; EN IEC 61000-3-2; EN 61000-3-3; EN 55011; EN 62920; EN 50549-1; NF EN 50549-1; EN 50549-10; NF EN 50549-10; G98; G99; G98/NI; G99/NI; UNE 217001; UNE 217002; NTS |
|--------------------------------|---|

(1) 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 your area.

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

(4) 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 [emea.APsistemas.com](http://emea.APsistemas.com).

## European offices

### APsystems

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