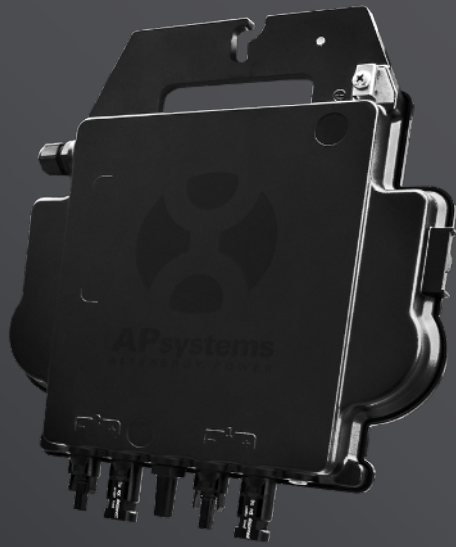




## DS3

### The most powerful Dual Microinverter

- One microinverter connects to two modules
- Max output power reaching 730VA or 880VA
- Two input channels with independent MPPT
- Reactive Power Control
- Maximum reliability, IP67
- Encrypted Zigbee Communication
- Safety protection relay integrated

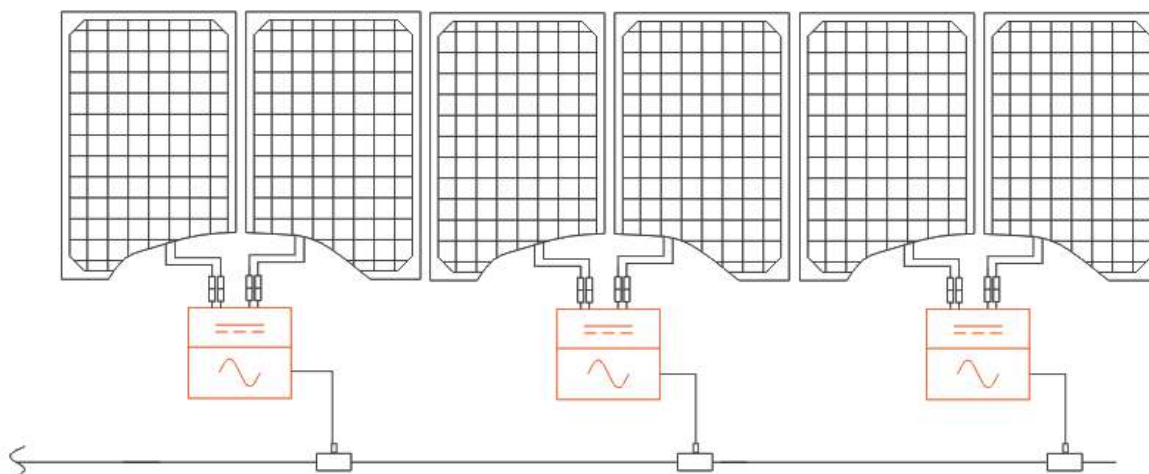
## PRODUCT FEATURES

APsystems 3<sup>rd</sup> generation of dual microinverters are reaching unprecedented power outputs of 730VA or 880VA to adapt to today's larger power module. With 2 independent MPPT, encrypted Zigbee signals, the DS3-L and DS3 benefit from an entirely new architecture and are fully backwards compatible with the QS1 and YC600 microinverters.

The innovative and compact design make the product lighter while maximizing power production. The components are encapsulated with silicone to reduce stress on the electronics, facilitate thermal dissipation, enhance waterproof properties and ensure maximum reliability of the system via rigorous testing methods including accelerated life testing. A 24/7 energy access through apps or web based portal facilitate remote diagnosis and maintenance.

The new DS3 series is interactive with power grids through a feature referred to as RPC (Reactive Power Control) to better manage photovoltaic power spikes in the grid. With a performance and an efficiency of 97%, a unique integration with 20% less components, APsystems DS3-L & DS3 are a game changer to residential and commercial PV.

## WIRING SCHEMATIC



## Datasheet | DS3 Microinverter Series

### Model

DS3-L

DS3

### Input Data (DC)

|                                                        |              |              |
|--------------------------------------------------------|--------------|--------------|
| Recommended PV Module Power (STC) Range <sup>(4)</sup> | 300Wp-550Wp+ | 400Wp-660Wp+ |
| Peak Power Tracking Voltage                            | 28V-45V      | 33 -45V      |
| Operating Voltage Range                                | 16V-60V      | 26V-60V      |
| Maximum Input Voltage                                  | 60V          |              |
| Maximum Input Current                                  | 18A x 2      | 20A x 2      |

### Output Data (AC)

|                                                |                                |       |
|------------------------------------------------|--------------------------------|-------|
| Maximum Output Power                           | 730VA                          | 880VA |
| Nominal Output Voltage/Range <sup>(1)</sup>    | 230V/184V-253V                 |       |
| Nominal Output Current                         | 3.2A                           | 3.8A  |
| Nominal Output Frequency/ Range <sup>(1)</sup> | 50Hz/48Hz-51Hz                 |       |
| Power Factor(Default/Adjustable)               | 0.99/0.8 leading...0.8 lagging |       |
| Maximum Units per 20A Branch <sup>(2)</sup>    | 6                              | 5     |

### Efficiency

|                         |       |
|-------------------------|-------|
| Peak Efficiency         | 97%   |
| CEC Efficiency          | 96.5% |
| Nominal MPPT Efficiency | 99.5% |
| Night Power Consumption | 20mW  |

### Mechanical Data

|                                     |                              |
|-------------------------------------|------------------------------|
| Operating Ambient Temperature Range | - 40 °C to + 65 °C           |
| Storage Temperature Range           | - 40 °C to + 85 °C           |
| Dimensions (W x H x D)              | 262mm x 218mm x 41.2mm       |
| Weight                              | 2.6kg                        |
| AC Bus Cable                        | 2.5mm <sup>2</sup>           |
| DC Connector Type                   | MC4                          |
| Cooling                             | Natural Convection - No Fans |
| Enclosure Environmental Rating      | IP67                         |

### Features

|                                 |                                                    |
|---------------------------------|----------------------------------------------------|
| Communication (Inverter To ECU) | Encrypted ZigBee                                   |
| Isolation Design                | High Frequency Transformers, Galvanically Isolated |
| Energy Management               | Energy Management Analysis (EMA) system            |
| Warranty <sup>(3)</sup>         | 10 Years Standard ; 20 Years Optional              |

### Compliances

|                                |                                                                                                                                                                                       |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety, EMC & Grid Compliances | EN 62109-1; EN 62109-2; EN 61000-6-1; EN 61000-6-3; UNE217002,UNE206007-1,RD647,RD1699,RD413; CEI 0-21; VDE0126-1-1,VFR2019,UTE C15-712-1,ERDF-NOI-RES_13E; EN 50549-1; VDE-AR-N 4105 |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

(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) 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.APsystems.com](http://emea.APsystems.com) (4) Please check the PV module compatibility with APsystems' E-Decoder tool or consult with APsystems' customer support



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Specifications subject to change without notice please ensure you are using the most recent update found at web : [emea.APsystems.com](http://emea.APsystems.com)

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