



## DS3

### The most powerful Dual Microinverter

- One microinverter connects to two modules
- Max output power reaching 625VA, 750VA or 880VA
- Two input channels with independent MPPT
- Reactive Power Control
- Maximum reliability, IP67
- Encrypted Zigbee Communication
- Safety protection relay integrated
- Perfectly match 5kW requirement with 8 units

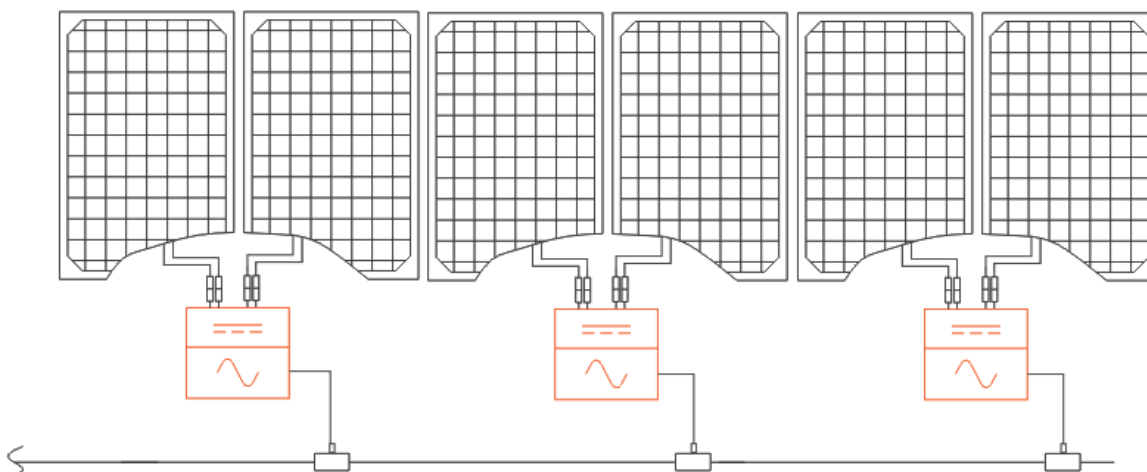
## PRODUCT FEATURES

APsystems 3<sup>rd</sup> generation of dual microinverters are reaching power outputs of 625VA, 750VA or 880VA to adapt to today's larger power module and be the perfect fit for residential and commercial solar systems in Australia. With 2 independent MPPT, encrypted Zigbee signals, the DS3-S, 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-S, DS3-L & DS3 are a game changer to residential and commercial PV.

## WIRING SCHEMATIC



## Datasheet | DS3 Microinverter Series

### Model

DS3-S

DS3-L

DS3

### Input Data (DC)

Recommended PV Module Power (STC) Range	250Wp-480Wp	255Wp-550Wp+	300Wp-660Wp+
Peak Power Tracking Voltage	22V-48V	25V-55V	32V-55V
Operating Voltage Range	16V-60V	16V-60V	26V-60V
Maximum Input Voltage	60V		
Maximum Input Current	16A x 2	18A x 2	20A x 2

### Output Data (AC)

Maximum Continuous Output Power	625VA	750VA	880VA
Nominal Output Voltage/Range*	230V/180V-260V		
Nominal Output Current	2.7A	3.3A	3.8A
Nominal Output Frequency/ Range*	50Hz/48Hz-51Hz		
Power Factor(Default/Adjustable)	0.99/0.8 leading...0.8 lagging		
Maximum Units per 20A Branch**	7	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	Stäubli MC4 PV-ADBP4-S2&ADSP4-S2
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***	10 Years Standard ; 15 Years Optional

### Compliances

Safety, EMC & Grid Compliances	AS/NZS 4777.2; IEC 62109-1, IEC 62109-2; EN 61000-6-3
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\*Nominal voltage/frequency range can be extended beyond nominal if required by the utility.  
\*\*Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

\*\*\* 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 [aunz.APsystems.com](http://aunz.APsystems.com).

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