

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



# 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

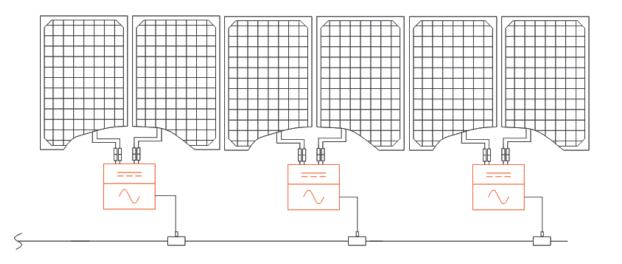
#### **PRODUCT FEATURES**

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 M	icroinverter	Series

Model	DS3-L	DS3		
Input Data (DC)				
Recommended PV Module Power (STC) Range	255Wp-550Wp+	300Wp-660Wp+		
Peak Power Tracking Voltage	30V-55\			
Operating Voltage Range	16V-60\	16V-60V		
Maximum Input Voltage	60V	60V		
Maximum Input Current	18A x 2	20A x 2		
Output Data (AC)				
Maximum Continuous Output Power	730VA	880VA		
Nominal Output Voltage/Range*	230V/184V-	230V/184V-253V		
Nominal Output Current	3.2A	3.8A		
Nominal Output Frequency/ Range*	50Hz/48Hz-	50Hz/48Hz-51Hz		
Power Factor(Default/Adjustable)	0.99/0.8 leading	0.99/0.8 leading0.8 lagging		
Maximum Units per 20A Branch**	6	5		
Efficiency				
Peak Efficiency	97%	97%		
CEC Efficiency	96.5%	96.5%		
Nominal MPPT Efficiency	99.5%	99.5%		
Night Power Consumption	20mW	20mW		
Mechanical Data				
Operating Ambient Temperature Range	- 40 °C to +	- 40 °C to + 65 °C		
Storage Temperature Range	- 40 °C to +	- 40 °C to + 85 °C		
Dimensions (W x H x D)	262mm x 218mm	262mm x 218mm x 41.2mm		
Weight	2.6kg	2.6kg		
AC Bus Cable	2.5mm	2.5mm <sup>2</sup>		
DC Connector Type	MC4	MC4		
Cooling	Natural Convection	Natural Convection - No Fans		
Enclosure Environmental Rating	IP67			
Features				
Communication (Inverter To ECU)	ation (Inverter To ECU) Encrypted ZigBee			
Isolation Design	High Frequency Transformer	High Frequency Transformers, Galvanically Isolated		
Energy Management	Energy Management Ana	Energy Management Analysis (EMA) system		
Warranty***	10 Years Standard ; 20	10 Years Standard ; 20 Years Optional		

**Compliances** 

Safety, EMC & Grid Compliances

\*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 emea. APsystems.com

#### **European offices**

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