

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



### DS3D

# Doubling the Performance of the Most Powerful Dual Microinverter series

- 2 input channels with independent MPPT and monitoring function
- Single unit connects to 4 modules
- Maximum continuous output power up to 1800VA
- Engineered to match the highest power modules available (Max input current 20A)
- Encrypted ZigBee Communication
- Safety protection relay integrated

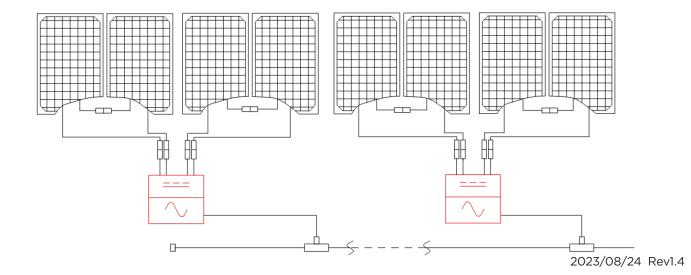
#### **PRODUCT FEATURES**

APsystems expands its 3<sup>rd</sup> generation of dual microinverter series with the DS3D. With unprecedented power outputs of 1800VA, the DS3D connects to 4 high power modules (2 by 2 in series). With 2 independent MPPTs, encrypted ZigBee signal, the DS3D benefits from an entirely new architecture.

The innovative design makes the product unique 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.

In addition, it provides 97% peak efficiency. DS3D is a game changer for multi residential and commercial PV rooftops.

#### WIRING SCHEMATIC



#### **Datasheet | DS3D Microinverter**

Model	DS3D
Region	EMEA

#### **Input Data (DC)**

Recommended PV Module Power (STC) Range	315Wp-660Wp+
Peak Power Tracking Voltage	56V-90V
Operating Voltage Range	52V-118V
Maximum Input Voltage	118V
Maximum Input Current	20A x 2
Isc PV	25A x 2

#### **Output Data (AC)**

Maximum Continuous Output Power	1800VA
Nominal Output Voltage/Range <sup>(1)</sup>	230V/184V-253V
Adjustable Output Voltage Range	180V-270V
Nominal Output Current	7.8A
Nominal Output Frequency/ Range <sup>(1)</sup>	50Hz/48Hz-51Hz
Adjustable Output Frequency Range	45Hz-55Hz
Power Factor(Default/Adjustable)	0.99/0.9 leading0.9 lagging
Maximum Units per 2.5mm² Branch <sup>(2)</sup>	2
Maximum Units per 4mm² Branch <sup>(2)</sup>	3

#### **Efficiency**

Peak Efficiency	97%
Nominal MPPT Efficiency	99.5%
Night Power Consumption	20mW

#### **Mechanical Data**

Operating Ambient Temperature Range(3)	-40 °C to +65 °C
Storage Temperature Range	- 40 °C to + 85 °C
Dimensions (W x H x D)	284mm X 234mm X 50.2mm
Weight	4.3kg
AC Bus Cable	2.5mm²(23A)/4mm²(28A)
DC Connector Type	Stäubli MC4 PV-ADBP4-S2&ADSP4-S2
Cooling	Natural Convection - No Fans
For all according to the control of	IDC7

**Enclosure Environmental Rating** IP67

#### **Features**

Communication (Inverter To ECU) <sup>(4)</sup>	Encrypted ZigBee
Isolation Design	High Frequency Transformers, Galvanically Isolated
Energy Management	Energy Management Analysis (EMA) system
Warranty <sup>(5)</sup>	10 Years Standard ; 20 Years Optional

#### **Compliance** Compliance

Isolation Design	High Frequency Transformers, Galvanically Isolated
Energy Management	Energy Management Analysis (EMA) system
Warranty <sup>(5)</sup>	10 Years Standard ; 20 Years Optional

(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 <a href="mailto:emea.APsystems.com">emea.APsystems.com</a>.

#### EN 62109-1/-2; EN 61000-6-1/-2/-3/-4; EN 50549-1; PN-EN 50549-1; VDE-AR-N 4105; IEC 62116; IEC 61727



**C** € <sup>©</sup> All Rights Reserved Specifications subject to change without notice please ensure you are using the most recent update found at web: <u>emea.APsystems.com</u>

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