8.1 DS3 Series Microinverter Datasheet

Model	DS3-S	DS3-L	DS3	
Input Data (DC)				
Recommended PV Module Power (STC) Range	250Wp-480Wp+	265Wp-570Wp+	300Wp-660Wp+	
Peak Power Tracking Voltage	22V-48V	25V-55V	32V-55V	
Operation 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	640VA	768VA	880VA	
Nominal Output Voltage/Range*	240V/211V-264V			
Nominal Output Current	2.7A	3.2A	3.7A	
Nominal Output Frequency/Range*	60Hz/59.3Hz-60.5Hz			
Power Factor(Default/Adjustable)	0.99/0.7 leading0.7 lagging			
Maximum Units per 20A and 30A Branch**	6/8	5/7	4/6	
AC Bus Cable	12AWG / 10AWG			
Efficiency				
Peak Efficiency	97%			
CEC Efficiency	96.5%			
Nominal MPPT Efficiency	99.5%			
Night Power Consumption	20mW			
Mechanical Data				
Operating Ambient Temperature Range	-40 °F to +149 °F (-40 °C to +65 °C)			
Storage Temperature Range	-40 $^{\circ}\mathrm{F}$ to +185 $^{\circ}\mathrm{F}$ (-40 $^{\circ}\mathrm{C}$ to +85 $^{\circ}\mathrm{C}$)			
Dimensions (W x H x D)	10.3" × 8.6" × 1.6" (262mm X 218mm X 41.2mm)			
Weight		5.7lbs(2.6kg)		
DC Connector Type	MC4			
Cooling	Natural Convection - No Fans			
Enclosure Environmental Rating	NEMA 6			
Overvoltage Category	OVC II For PV Input Circuit, OVC III For Mains Circuit			
Utility Interconnection Voltage And Frequency Trip	See NOTE 1 Below			
Limits And Trip Times				
Voltage Trip Limit And Trip		+/-2V		
Frequency Time Accuracy		+/-0.1Hz		
Alternate Trip times	See NOTE 1 Below			
Features				
Communication (Inverter To ECU)	Encrypted ZigBee			
Isolation Design	High Frequency Transformers, Galvanically Isolated			
Energy Management	Energy Management Analysis (EMA) system			
Over/Under Voltage Protection	Yes			

^{*}Nominal voltage/frequency range can be extended beyond nominal if required by the utility.

Over/Under Frequency Protection

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Yes

^{**} 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 usa.APsystems.com/canada.APsystems.com