8.1 DS3 Series Microinverter Datasheet

Model		DS3-S	DS3-L	DS3	DS3-H
Input Data (DC)					
Recommended PV Module Power (STC) Range		250Wp-480Wp+	255Wp-550Wp+	300Wp-620Wp+	330Wp-660Wp+
Peak Power Tracking Voltage		22V-48V	25V-55V	32V-55V	36V-55V
Operation Voltage Range		16V-60V	16V-60V	26V-60V	26V-60V
Maximum Input Voltage		60V			
Maximum Input Current		16A x 2	18A x 2	20A x 2	20A x 2
Output Data (AC)					
Maximum Continuous Output Power		640VA	768VA	880VA	1050VA
Nominal Output Voltage/Range		240V/211V-264V*			
Adjustable Output Voltage Range		150V-280V			
Nominal Output Current		2.7A	3.2A	3.7A	4.4A
Maximum Units per 20A Branch[2]		6 units	5 units	4 units	3 units
Nominal Output Frequency/Range		60Hz/59.3Hz-60.5Hz*			
Adjustable Output Frequency Range		55-65Hz			
Output Power Factor Rating		>0.99(-0.7~0.7 adjustable)			
Total Harmonic Distortion		<3%			
Maximum Output Fault Current (AC) And Duration		5.691 Apk, 26.75 ms of duration			
Maximum Output Overcurrent Protection		6.3A	6.3A	10A	10A
Operating Frequency		2402MHz to 2483MHz			
RF Output Power		20DBm			
Efficiency					
Peak Efficiency		97%			
CEC Efficiency		96.5%			
Nominal MPPT Efficiency		99.5%			
Night Power Consumption		20mW			
Mechanical Data					
Operating Ambient Temperature Range		-40 ℉ to +149 ℉(-40 °C to +65 °C)			
Storage Temperature Range		-40 ℉ to +185 ℉ (-40 °C to +85 °C)			
Dimensions (W x H x D)		10.3” × 8.6” × 1.6” (262mm X 218mm X 41.2mm)			
Weight		5.7lbs(2.6kg)			
AC Bus Maximum Current		25A			
Connector Type		MC4 Type			
Cooling		Natural Convection - No Fans			
Enclosure Environmental Rating		Type 6			
Overvoltage Category		OVC II For PV Input Circuit, OVC III For Mains Circuit			
Utility Interconnection Voltage And Frequency Trip Limits And Trip Times		See NOTE 1 Below			
Trip Limit And Trip Time Accuracy	Voltage	+/-2V			
	Frequency	+/-0.1Hz			
	Alternate Trip times	See NOTE 1 Below			
Features					
Communication (Inverter To ECU)		Wireless			
Transformer Design		High Frequency Transformers, Galvanically Isolated			
Monitoring		Via EMA* Online Portal			
Over/Under Voltage Protection		Yes			
Over/Under Frequency Protection		Yes			