



PV INVERTER

Commercial Series / M80U

Features

- Two stage topology with wide input operation range, 200 to 1000 Vdc
- Allows 0-90° tilt-mount installation
- Dual MPP tracker inputs
- Superior efficiency performance, 98.8% peak & 98.5% CEC
- NEMA 4X outdoor rated enclosure
- Integral DC Arc fault detector
- AC & DC disconnects
- String monitoring

www.deltaww.com



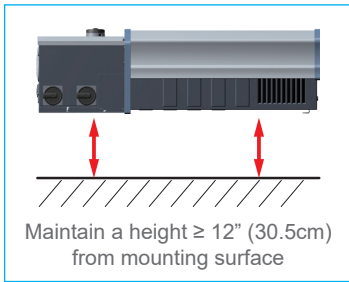
Product Overview

Delta's M80U is the industry's only 80kW inverter with an optimal cost and performance profile and the highest power density available in a string inverter. Delta's largest string inverters provide unbeaten performance and the industry's lowest Levelized Cost of Energy (LCOE), making them optimal building blocks for Commercial, Industrial and Utility-Scale installations.



Form Factor

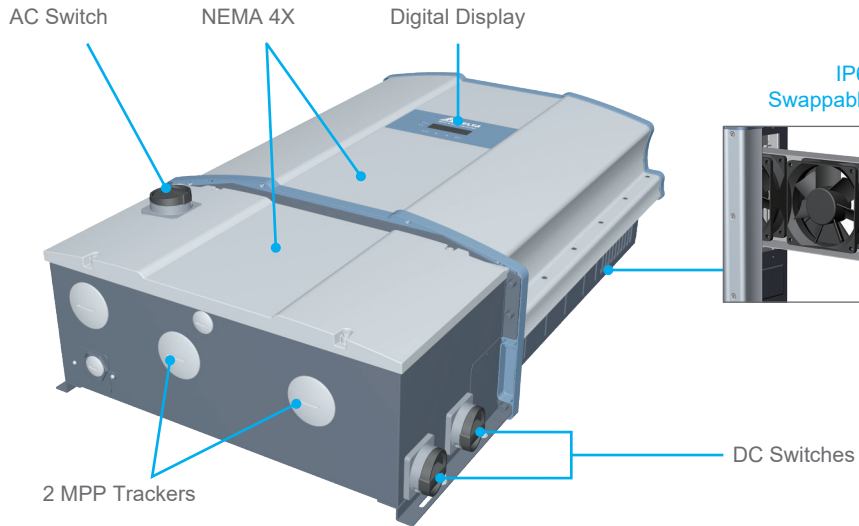
Horizontal Installation



String Monitoring Function

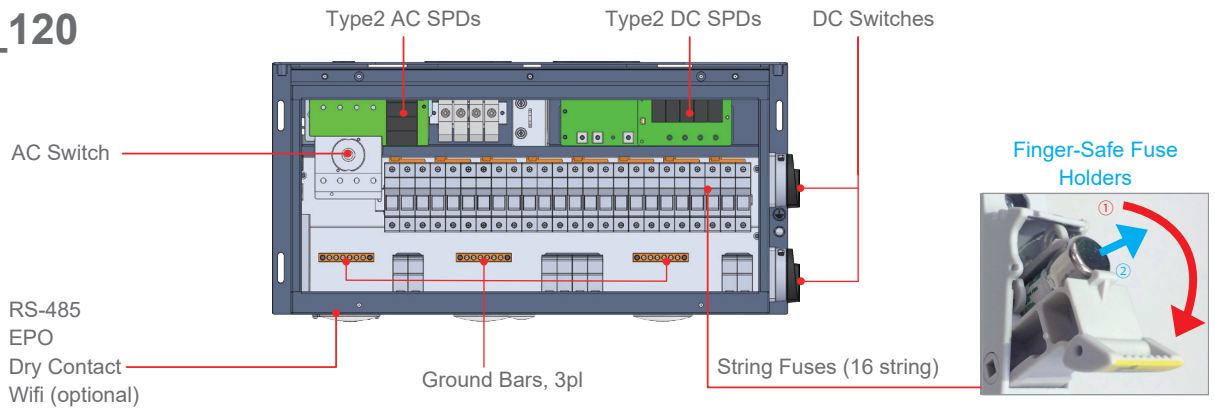
IDC1	(A)
1: 1.6	4: 1.6
2: 1.6	5: 1.7
3: 1.6	6: 1.7

* For 122 models.

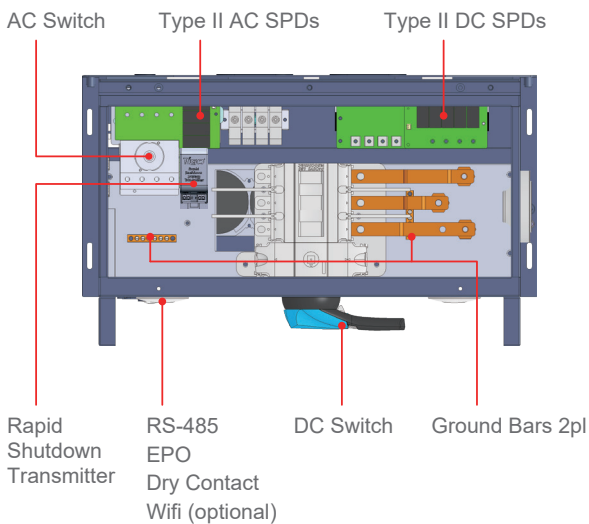


Wiring Box Configurations

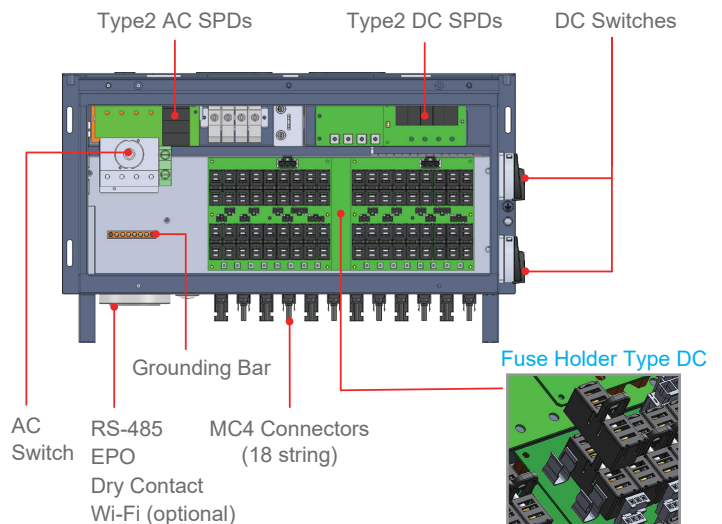
M80U_120



M80U_121



M80U_122



Specifications

Model Number	M80U_120	M80U_121	M80U_122
DC INPUT			
Max. Input Voltage	1000V (per NEC)		
Operating Voltage Range	200 - 1000V		
Start Voltage	>250V		
VMPP Range for POUT-RATED	600 - 800V		
Rated Voltage	710V		
Number of MPP Trackers	2		
Current Limit, IMP-MAX /MPPT	70A/MPPT		
Allowable Array ISC-MAX /MPPT	108A/MPPT	160A/MPPT	108A/MPPT
Connection Type	16 pr. Fuse holders	2pr. Terminal blocks	18 pr. MC4 connectors
Allowable Conductors	#8~#14 AWG, Cu only	#1~#3/0 AWG, Cu/Al	#10~#12 AWG, Cu only
Surge Protection, DC Side	SPD Type II 10kA (8 x 20us)		
Combiner Fuses	32 x 15A	Not Provisioned	36 x 15A
DC Disconnect Switch	Yes		
String Current Monitor	Not Provisioned	Not Provisioned	Yes
Rapid Shutdown Transmitter	Not Provisioned	Yes	Not Provisioned
AC OUTPUT			
Rated Output Power	80kW ¹⁾		
Max. Output Power	83kVA ²⁾		
Max. Output Current	100A		
Grid Configuration	480/277V (3P-4W/Y) or 480V (3P-3W/Δ)		
Inverter Connection	3W or 4W programmable		
Operating Voltage Range	±10%		
Operating Frequency Range	50/60Hz		
Power Factor	Unity at PRATED; adjustable: [0.8 ind ~0.8 cap]		
Surge Protection, AC Side	SPD Type II 10kA (8 x 20us)		
Ground fault protection	Yes		
THD	<3%		
Connection Type	AC Switch & Terminal block #1~#2/0		
Night Time Consumption	<3W		
EFFICIENCY			
Peak Efficiency	98.8%		
CEC Efficiency	98.5%		
Euro Efficiency	98.5%		
INFORMATION			
Comm Port Protocol	RS-485 Delta or Sunspec		
Display	20 x 4 line LCD		
REGULATION			
	UL1741 SA, UL1741, UL1998, UL 1699B, IEEE1547, IEEE1547.1 CSA C22.2, FCC Part 15 (Class B), PV Rapid Shutdown System Equipment		
GENERAL DATA			
Smart Inverter Functionality	Voltage/Frequency Ride through, Volt/Var, Volt/Watt, Power curtailment, Frequency/Watt		
Operating Temp. Range	-13° to 140°F (-25° to 60°C)		
Protection Level	NEMA 4X		
Operating Elevation	<9800ft (<3000m)		
Cooling	Forced air cooling with Smart Fan Control		
Noise	69.5 dBA @1m, Amb25°C		
Dimension (in)	24.2 x 36.3 x 10.8		24.2 x 38.8 x 10.8
Weight (lb)	W/ Wiring Box	182.8	176.2
	W/O Wiring Box	149.9	
	Shipping Weight	249.1	246.9
			253.5

1) @TAMB ≤ 40°C, VIN ≥ 600VDC

2) @TAMB ≤ 40°C, VIN ≥ 650VDC

*Specifications are subject to change without prior notice



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