



## PV INVERTER

### Commercial Series / M42U

#### 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, 98.6% peak & 98.0% CEC
- NEMA 4X outdoor rated enclosure
- Integral DC Arc fault detector
- AC & DC disconnects
- String monitoring

[www.deltaww.com](http://www.deltaww.com)



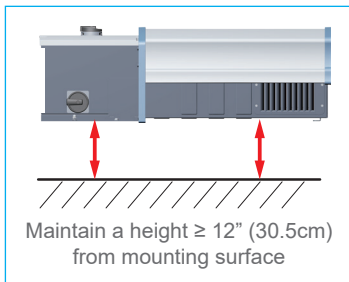
# Product Overview

Delta's grid-tied, three-phase, transformerless inverters range from 36kW to the industry's first 80kW inverter, offering unequalled design flexibility for your Commercial, Industrial and Utility-Scale installations. Delta's M42U inverters help you optimize every site.



## Form Factor

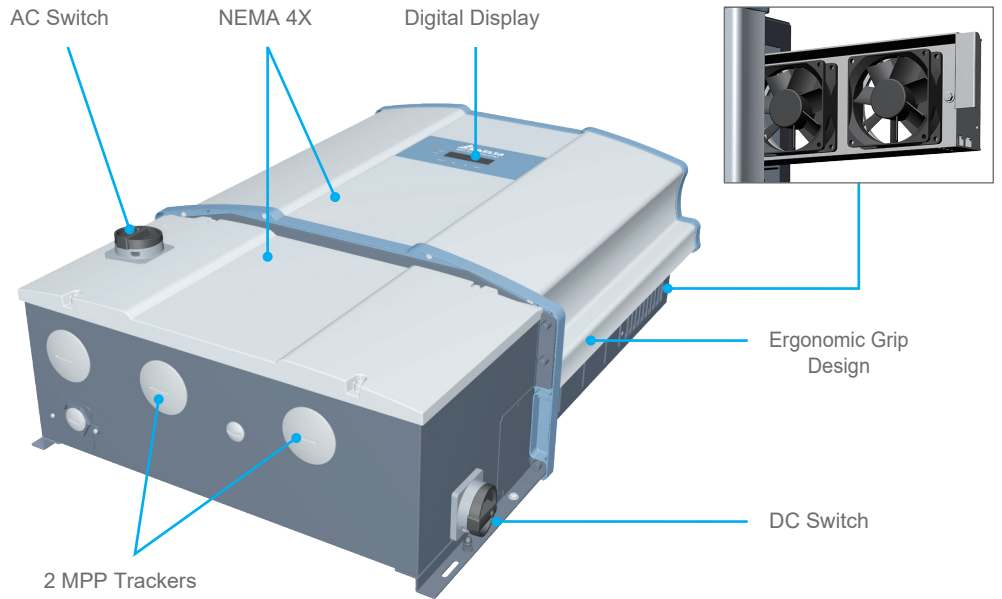
Horizontal Installation



String Monitoring Function

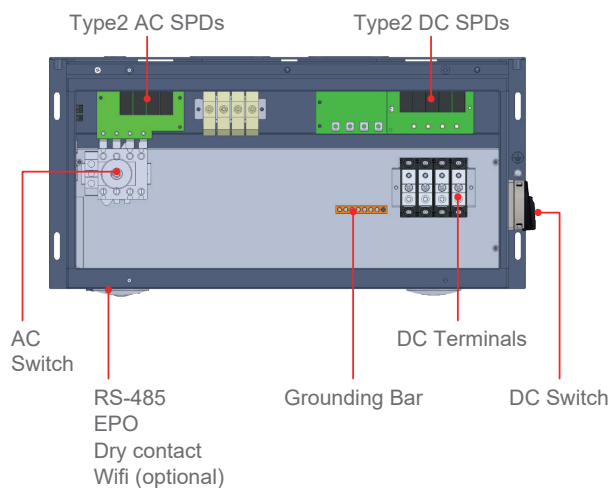
IDC1	(A)
1 : 8.0	4 : 8.0
2 : 8.1	5 : 8.1
3 : 7.9	6 : 8.1

\* For 122 model.

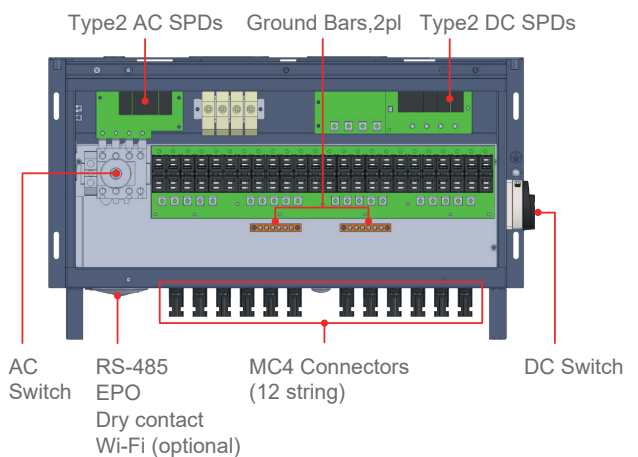


## Wiring Box Configurations

### M42U\_121



### M42U\_122



# Specifications

Model Number	M42U_121	M42U_122	
<b>DC INPUT</b>			
Max. Input Voltage	1000V (per NEC)		
Operating Voltage Range	200 - 1000V		
Start Voltage	>250V		
VMPP Range for POUT-RATED	545 - 830V		
Rated Voltage	710V		
Number of MPP Trackers	2		
Current Limit, IMP-MAX /MPPT	40A/MPPT		
Allowable Array ISC-MAX /MPPT	100A/MPPT		
Connection Type	2pr. Terminal blocks	12 pr. MC4 connectors	
Allowable Conductors	#2/0 - #8 AWG, Cu/Al	#10 - #12 AWG, Cu only	
Surge Protection, DC Side	SPD Type II 10kA (8 x 20us)		
Combiner Fuses	Not Provisioned	24 x 15A	
DC Disconnect Switch	Yes		
String Current Monitor	Not Provisioned	Yes	
<b>AC OUTPUT</b>			
Rated Output Power	42kW <sup>1)</sup>		
Max. Output Power	46kVA <sup>2)</sup>		
Max. Output Current	56.2A		
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 #3~#6 AWG		
Night Time Consumption	<3W		
<b>EFFICIENCY</b>			
Peak Efficiency	98.6%		
CEC Efficiency	98.0%		
Euro Efficiency	98.4%		
<b>INFORMATION</b>			
Comm Port   Protocol	RS-485   Delta or Sunspec		
Display	20 x4 line LCD		
<b>REGULATION</b>			
	UL1741 SA, UL1741, UL1998, UL 1699B, IEEE1547, IEEE1547.1, CSA C22.2, FCC Part 15 (Class B)		
<b>GENERAL DATA</b>			
Smart Inverter Functionality	Voltage/Frequency Ride through, Volt/Var, Volt/Watt, Power curtailment, Frequency/Watt		
Operating Temp. Range	-13°F to 140°F (-25°C to 60°C)		
Protection Level	NEMA 4X		
Operating Elevation	< 9800ft (< 3000m)		
Cooling	Forced air cooling with Smart Fan Control		
Audio Noise	≤ 55dB, -13°F (-25°C) / Rated power		
Dimension (in)	24.2 x 33.1 x 10.8	24.2 x 35.5 x 10.8	
Weight (lb)	W/ Wiring Box	129.8	135.8
	W/O Wiring Box	99.2	
	Shipping Weight	147.8	153.8

1) @TAMB ≤ 40°C, VIN ≥ 545VDC

2) @TAMB ≤ 40°C, VIN ≥ 630VDC

\*Specifications are subject to change without prior notice



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