



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



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

Maintain a height $\geq 12''$ (30.5cm) from mounting surface

IP68 Swappable Fan Kit

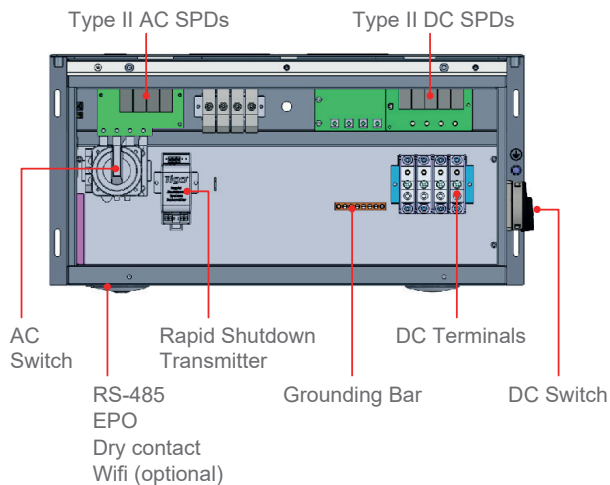
String Monitoring Function

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

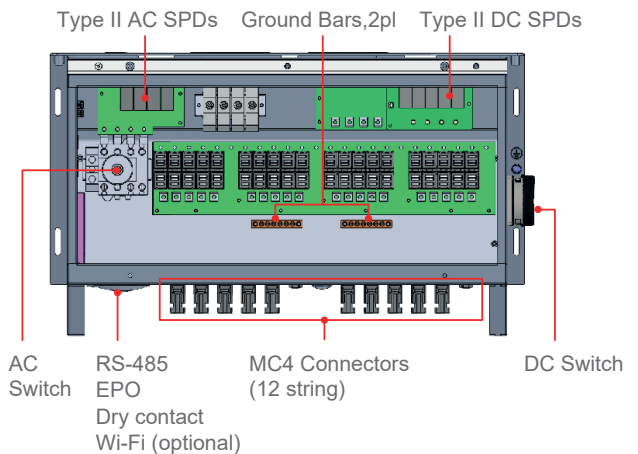
* For 122 model.

Wiring Box Configurations

M42U_121



M42U_122



Specifications

Model Number	M42U_121	M42U_122	
DC INPUT			
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	
Rapid Shutdown Transmitter	Yes	Not Provisioned	
AC OUTPUT			
Rated Output Power	42kW ¹⁾		
Max. Output Power	46kVA ²⁾		
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		
T.H.D	< 3%		
Connection Type	AC Switch & Terminal block #3~#6 AWG		
Night Time Consumption	<3W		
EFFICIENCY			
Peak Efficiency	98.6%		
CEC Efficiency	98.0%		
Euro Efficiency	98.4%		
INFORMATION			
Comm Port Protocol	RS-485 Delta or Sunspec		
Display	20 x4 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°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





Delta Electronics (Americas), Ltd

46101 Fremont Blvd, Fremont, CA 94538

www.delta-americas.com

Customer Service Technical Support

PVI.Support.US@deltaww.com

+1-877-442-4832

2020 / 04 / 27