

M125HV



The power behind competitiveness

Delta Commercial Series

Product Features

- Wireless Communication (SUB_1G)
- Excellent efficiency performance, 99.2% peak & 99.0% EU
- Smart Online IV curve scan and Diagnosis
- Night time Reactive Power Generation
- Anti-PID Function
- 20 Pairs of Fuses with Smart string current monitoring
- Compatible with both Al & Cu AC Cables
- Type II SPDs on both DC and AC Sides

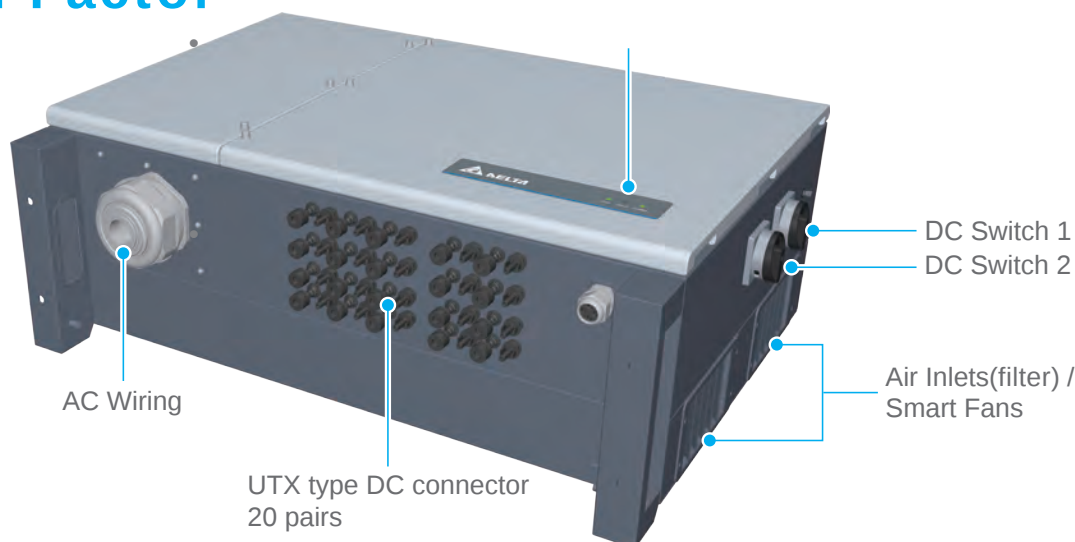


Product Overview

M125HV have excellent efficiency performance, Peak 99.2% and EU 99.0%.



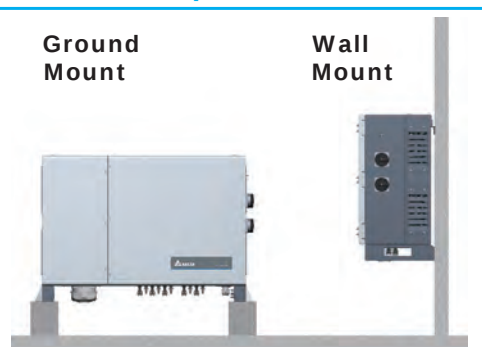
Form Factor



Landscape installation

Ground
Mount

Wall
Mount



All-in-one Design:

String fuses, surge protection devices and DC switch are integrated into the design.



String Monitoring Function:

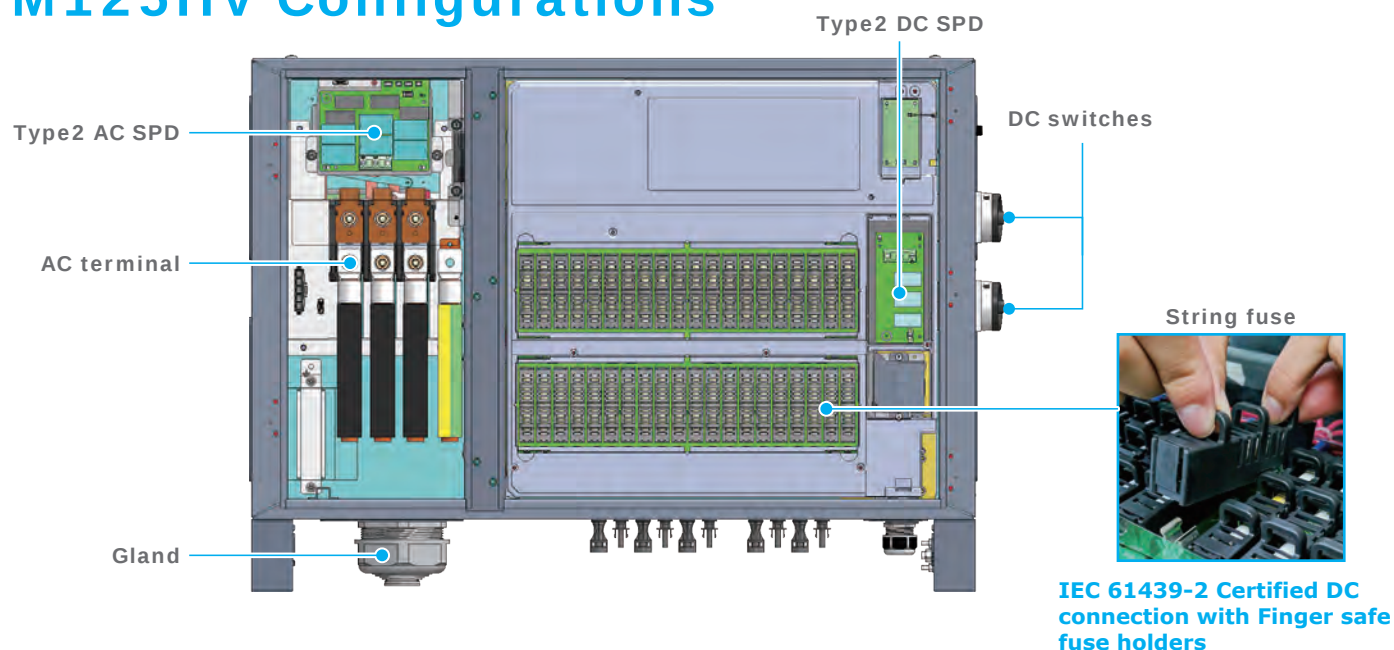
The string monitoring function can precisely record real-time current value up to 20 strings via communication interface.



High Durability Design:

Based on electrolytic capacitor free design and IP65 protection level, increased Inverter service life and Reliability.

M125HV Configurations



Delta Commercial Series

Technical data - M125HV

INPUT (DC)	M125HV
Maximum Recommended PV power	200 kWp
Max. Input Voltage ¹	1600 V
DC Input Voltage Range	860 ~ 1500 V
Start-up Voltage	> 1050 V
Start-up Power	< 500 W
MPPT Voltage Range	860 ~ 1500 V
MPP Voltage Range; Full Power ²	860 ~ 1450 V
Nominal DC Voltage	1050 V
Maximum Input Current	150 A
Maximum Short Circuit Current	320 A
No. of Independent MPP Trackers	1 No.
Number of DC inputs	20 Pairs
String Current Monitoring	Yes
Anti-PID Function	Yes
Input Connection Type	Amphenol UTX Connector - 4/6 Sq. mm
DC Disconnect Switch	Yes; 2 x Integrated Disconnectors

OUTPUT (AC)	
Nominal Output Power ³	125 kVA
Maximum Output Power ⁴	125 kW / 140 kVA
Nominal Output Current	120 A
Max. Output Current	135 A
Nominal AC Voltage	3 Ph, 600 V
AC Voltage Range ⁵	600 V -36 % ~ +15 % (384 ~ 690 V)
Nominal Frequency	50 Hz
Frequency Range ⁵	50 Hz ± 10 % (45 ~ 55 Hz)
Power Factor at Rated Power	Unity
Reactive Power (Adjustable)	0.8 Lagging ~ 0.8 Leading
Night time Reactive Power Generation	Yes
Total Harmonic Distortion	< 3% at Rated Power
DC Injection	< 0.4% at Rated Current
No. of Conductors (user settable)	4 Wire (L1, L2, L3, PE)
Output Connection Type	Ring terminal lug with Terminal block - Cu: 50 ~ 185 mm ² ; Al: 95 ~ 185 mm ² , Armoured / Unarmoured

EFFICIENCY	
Maximum Efficiency	99.20%
Euro Efficiency	99.00%

PROTECTION	
Input Disconnection Device	Yes
Ground fault / Grid monitoring	Yes
DC Reverse Polarity Protection	Yes
DC Over Voltage / Current Limitation Protection	Yes
String Fuse Protection	Yes; 20 A, 1500 V
DC / AC Short Circuit Protection	Yes
AC Over Voltage / Current Limitation Protection	Yes
DC / AC Surge Protection	Yes; Type II - SPD (Optional - Type I (or) Type I+II SPD)

GENERAL DATA	M125HV
Dimension (H/W/D)	663 x 900 x 334 mm
Weight	80 kg
Operating Temperature Range	-25°C to +60°C (Power Derating > 50°C)
Relative Humidity	0 ~ 100 %, Non-condensing
Maximum Operating Altitude	< 3000 m above sea level
Enclosure Rating	IP 65
Noise Level	< 78 dB
Consumption at Night / Standby	< 3.5 W
Cooling	Forced Air

STANDARDS	
Anti-Islanding / Grid Regulation	VDE AR-N 4110; IEC 61727 & IEC 62116;
LVRT	IEC 62910;
EMC	IEC 61000;
Safety Testing	IEC 62109-1 & IEC 62109-2; IEC 61439-2;
Efficiency	IEC 61683;
Environmental Testing	IEC 60068;
Enclosure Protection	IEC 60529;
CE Conformity	Yes

COMMUNICATION	
Communication Interface	Modbus RS-485, SUB_1G
Digital Inputs	Yes; 6 Nos.
Dry Contacts	Yes; 2 Nos.
Emergency Power Off (EPO)	Yes; 1 Nos.
Display	LED Indicators, Data visualization via Gateway / Commissioning software
Built-in Energy Data Logger	Yes

WARRANTY	
Standard Warranty ⁶	5 Years

Notes

1. The Max Withstand Voltage is 1600 V_{DC}.
(Inverter will stop generating output power when input voltage is over 1500 V_{DC})
2. Ambient < 0°C : 860 ~ 1450 V_{DC}; Ambient < 25°C : 860 ~ 1350 V_{DC};
Ambient < 40°C : 860 ~ 1250 V_{DC};
3. At Unity Power Factor (VA = W)
4. At PF= 1, Maximum Power = 125 kW; PF= 0.9, Maximum Power = 125 kW / 140 kVA.
5. AC Voltage and Frequency range will be programmed according to the individual country requirements.
6. Refer to Delta's Standard Warranty Terms and Conditions for more details.