



M250HV

High-efficiency three-phase solar inverter for large ground-mounted systems.



1500 V

High input voltage



99.0%

Peak efficiency

- Easy to install under the modules (IP66)
- Separate AC wiring box for added security
- 12 MPP trackers for 30 module strings
- Reactive power compensation 24/7
- Optional wireless communication via Sub-1G
- Arc detection, reverse polarity protection
- Anti-PID function

250 kVA solar inverters

Input (DC)	M250HV
Max. input voltage	1500 V _{DC}
Operating voltage range	500 to 1500 V _{DC}
MPP voltage range	550 to 1500 V _{DC}
MPP voltage range with max. power	820 to 1350 V _{DC} ¹⁾
Nominal voltage	1150 V _{DC}
Max. current (per MPP tracker/total)	26 A/312 A
Max. short-circuit current I _{SC} per input stage ²⁾	60 A per MPP tracker
Max. number of MPP trackers	12
Max. number of modules strings per MPP tracker	6 x 2; 6 x 3
DC surge protection devices	Type 2 (EN 50539-11), replaceable

Output (AC)	M250HV
Max. apparent power ³⁾	250 kVA
Max. active power ³⁾	250 kW ⁴⁾
Nominal apparent power ³⁾	250 kVA
Voltage range ⁵⁾	800 V _{AC} -20%/+15%; 3 ph. + PE (Δ)
Max. current	180.5 A
Frequency range ⁵⁾	50/60 Hz ± 5 Hz
Adjustment range of power factor	0.8 cap to 0.8 ind
Total harmonic distortion (THD)	< 3% at nominal apparent power
Consumption in night mode ⁶⁾	< 5 W
AC surge protection devices	Type 2 (EN 61463-11), replaceable

General Specifications	M250HV
Delta model name	M250HV
Peak efficiency	99.0%
Efficiency EU	98.8%
Operating temperature range	-25 to +60°C
Temperature range without power derating	-25 to +50°C
Storage temperature range	-25 to +60°C
Relative humidity	0 to 100%, non-condensing
Max. operating altitude	4000 m (above sea level)
Topology	Without transformer
Standard warranty	5 years (warranty extension available upon request)

Mechanical design	M250HV
Dimensions (W x H x D)	993 × 644 × 284 mm
Weight	101 kg
Cooling	Replaceable fan module
Mounting options	Wall mounting ⁷⁾ , floor mounting ⁸⁾
Disconnectors	4 mechanical DC disconnectors
Connection type AC side	Screw terminals; wire cross-section: Cu 95 bis 300 mm ² , Al 120 to 300 mm ² ; cable diameter: 33 to 77 mm
Connection type SC side	30 Paar DC plugs Amphenol H4 Plus ⁹⁾

Communication	M250HV
Communication interfaces	2 x RS485, 2 x dry contacts, 1 x external power-off, 6 x digital inputs, Sub-1G (optional)
Data visualization	DeltaSolar app, MyDeltaSolar Cloud
Display of operating status	3 LEDs

Safety/Standards	M250HV
Protection class	IP66
Safety class	I
Configurable trip parameters	Yes
Insulation monitoring	Yes
Overload behavior	Current limitation, power limitation
Anti-islanding protection/grid regulation	Enedis-PRO-RES_10E, Enedis-PRO-RES_64E, VDE-AR-N 4110, VDE-AR-N 4120
EMC	EN 61000-6-2, EN 61000-6-3, EN 61000-3-11, EN 61000-3-12
Safety	IEC 62109-1/-2; CE compliance

- 1) <35°C: 820 to 1350 VDC; <40°C: 1000 to 1350 VDC; <50°C: 1200 to 1250 VDC
- 2) Max. short-circuit current of a PV string or PV generator in accordance with IEC 60364-7-712
- 3) Cos Phi = 1 (VA = W)
- 4) The active power can be limited.
- 5) AC voltage and frequency range are programmed based on the respective country regulations.
- 6) Night-time consumption with standby communication
- 7) Mounting plate included in scope of delivery
- 8) Mounting feet can be ordered separately
- 9) Included in scope of delivery



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