

M30A Flex

High-efficiency three-phase solar inverters for residential and commercial PV systems.

200 V↑

Wide input voltage range (200 to 1000 V)

98.6%

Peak efficiency

- Low noise levels — perfect for use in PV systems on residential or commercial buildings
- Stable performance up to 50 °C ambient
- 3 MPP trackers for more flexibility when designing the PV system
- Commissioning and monitoring with smartphone app via integrated Wi-Fi

33 kVA solar inverters

Input (DC)	M30A Flex
Max. input voltage [1]	1000 V_{DC}
Operating voltage range	200 to 1000 V_{DC}
MPP voltage range	200 to 1000 V_{DC}
MPP voltage range with max. power	480 to 900 V_{DC}
Nominal voltage	600 V_{DC}
Max. current (per MPP tracker/total)	30 A/72 A
Max. short-circuit current I_{SC}	50 A per MPP tracker
Max. number of MPP trackers	3
Max. number of module strings per MPP tracker	2
DC surge protection devices	Type 2 (EN 50539-11), replaceable

Output (AC)	M30A Flex
Max. apparent power [2]	33 kVA
Max. active power [2]	33 kW
Nominal apparent power [2]	30 kVA
Voltage range [3]	230/400 V_{AC} -20%/+30%; 3 ph. + PE or 3 ph. + N + PE
Max. output current	50 A
Frequency range [3]	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 [4]	< 2 W
AC surge protection devices	Type 2 (EN 61463-11), replaceable

General specifications	M30A Flex
Delta model name	M30A_230
Delta part number	RPI303M230100
Peak efficiency	98.6%
Efficiency EU	98.2%
Operating temperature range	-25 to +60°C
Temperature range without power derating	-25 to +40 °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	M30A Flex
Dimensions (H x W x D)	651 × 520 × 220 mm
Weight	42 kg
Cooling	Natural convection
Mounting options	Wall mounting [5]
Disconnectors	1 mechanical DC disconnector
Connection type AC side	1 AC plug [6]
DC connection type	6 pairs of DC plugs Amphenol H4 [6]

Communication	M30A Flex
Communication interfaces	2 x RS485, 2 x dry contacts, 1 x external power-off, 6 x digital inputs, Wi-Fi
Data visualization	DeltaSolar app, MyDeltaSolar Cloud
Display of operating status	3 LEDs

Safety/Standards	M30A Flex
Protection class	IP66
Safety class	I
Configurable trip parameters	Yes
Insulation monitoring	Yes
Overload behavior	Current limitation, power limitation
Anti-islanding protection/grid regulation	VFR 2019 (Enedis-PRO-RES_10E/_64E), VDE-AR-N 4105/4110, EN 50549-1, C10/11, Netbeheer NL
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) The max. voltage withstand is 1000 VDC. The inverter starts working when the input voltage drops below 1000 VDC.
2) Cos Phi = 1 (VA = W)
3) AC voltage and frequency range are programmed based on the respective country regulations.
4) Night-time consumption with standby communication
5) Mounting plate included in scope of delivery
6) Included in scope of delivery

Email: solarsales.emea@deltaww.com

Telephone: +49 7641 455 547 (phone number in Germany)