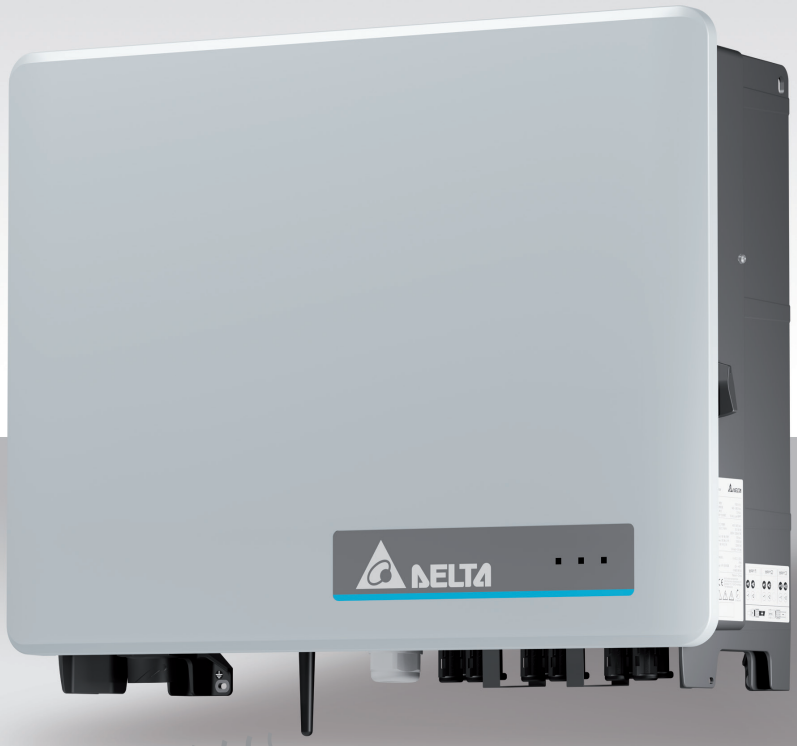
3 MPP Trackers
Ideal for commerical and agricultural PV Systems



COMPATIBLE WITH

DeltaSolar
APP 2.0 & Cloud

M30A Flex

High-efficiency three-phase solar inverters. –
The perfect choice for commercial and agricultural PV systems.

Features

- 3 MPP trackers for more flexibility in PV system design
- Lightweight with IP66 housing for harsh environmental conditions
- Natural convection for low-noise operation
- Built-in mechanical DC disconnector, AC and DC SPD Type 2
- Large front door for easy and safe access to internal components
- Integrated Wi-Fi for connecting to a smartphone or an Internet router
- Reactive power compensation 24/7
- Data point collection for string monitoring and I-V curve creation
- Arc fault and reverse polarity protection, Anti-PID feature

solarsolutions.delta-emea.com

33 kVA solar inverters

Technical Data

INPUT (DC)	M30A Flex
Max. input voltage	1000 V_{DC} [1]
Input voltage range	200 to 1000 V_{DC}
MPP operating voltage range (full power)	480 to 900 V_{DC}
Nominal voltage	600 V_{DC}
Max. current	Total: 72 A (30 A per MPP Tracker)
Max. short-circuit current I_{SC}	50 A per MPP tracker
Night time consumption	< 2 W [2]
Max. number of MPP trackers	3
DC Surge Protection Devices	Type 2 (EN 50539-11), replaceable

OUTPUT (AC)	
Max. apparent power	33 kVA [3]
Max. active power	33 kW [3] [4]
Nominal apparent power	30 kVA [3]
AC voltage range	230/400 V_{AC} -20% / +30%; [5] 3 Phases + PE (Δ) or 3 Phases + N + PE (Y)
Max. AC output current	50 A
Frequency range	50 / 60 Hz ± 5 Hz [5]
Adjustment range power factor	0.8 cap to 0.8 ind
Total harmonic distortion (THD)	< 3% at nominal apparent power
AC Surge Protection Devices	Type 2 (EN 61463-11), replaceable

GENERAL SPECIFICATION	
Delta model name	M30A_230
Peak efficiency	98.6%
EU efficiency	98.2%
Overall operating temperature range	-25 to +60 °C
Operating temperature range without derating	-25 to +40 °C
Storage temperature	-25 to +60 °C
Relative humidity	0 to 100 %, non-condensing
Max. operating altitude	4000 m (above sea level)
Topology	Without transformer
Standard guarantee	5 years (guarantee extension is possible)

MECHANICAL DESIGN	
Dimensions (W x H x D)	650 × 520 × 220 mm
Weight	42 kg
Cooling	Natural convection
AC connection type	AC plug (delivered with inverter) for 16 to 25 mm^2
DC connection type	6 pairs of Amphenol H4 PV connectors
Communication interfaces	2 x RS485, 2 x Dry contacts, 1 x EPO, 1 x 12 V_{DC}, 6 x Digital inputs
Communication	RS485, Wi-Fi, Sub-1G (optional)
Disconnectors	Mechanical
Status display	3 LED: On Grid, Communication, Alarm
Data visualization	Via Gateway
Mounting options	Wall mounting

SAFETY / STANDARDS	M30A Flex
Protection degree	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, Enedis-PRO-RES_64E), VDE-AR-N 4105, VDE-AR-N 4110, EN 50549-1
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 maximum voltage withstand is 1100 V_{DC}. The inverter starts to work when the PV voltage drops below 1000 V_{DC}.
2) Night time consumption with standby communication
3) Cos Phi = 1 (VA = W)
4) At ambient temperatures ≤ 35 °C. The active power can be limited.
5) AC voltage and frequency range will be programmed according to the individual country requirements.

United Kingdom
Email: sales.uk@solar-inverter.com
Tel: 0800 051 4280 (Free Call)

International
Email: sales.europe@solar-inverter.com
Tel: +49 (0) 7641 455 547