Efficient
- Maximum efficiency of 98.6 %
- Superior power density: 60 kW with only 75 kg of weight

Safe and Reliable
- Maximum availability with 60 kW units
- Inverter manager acts as a central control unit

Flexible
- DC input voltage of up to 1,000 V
- DC-Combiner Box for flexibility in DC equipment

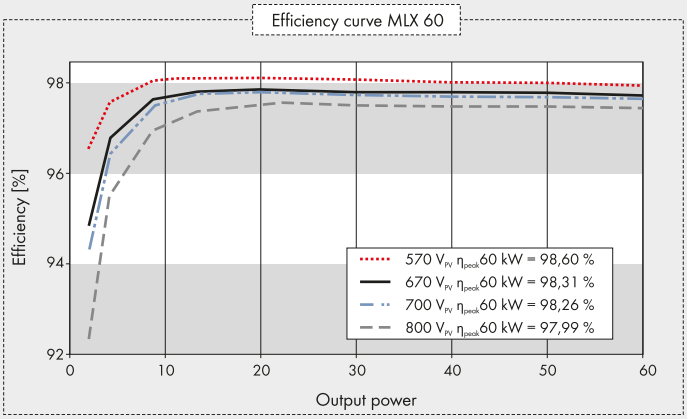
Innovative
- Cutting-edge system design

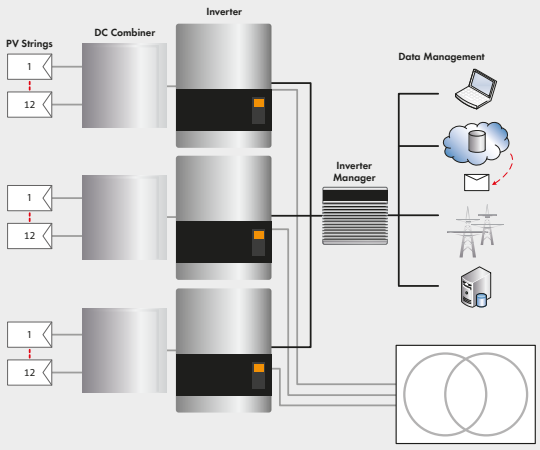
MLX 60

The efficient solution for tomorrow's large-scale PV power plants

The new MLX 60 is an innovative global solution for commercial and industrial PV systems. It combines the advantages of decentralized system layouts with the benefits of a centralized inverter design in a solution that brings together the best of both worlds. High efficiency, flexible system design, easy installation, simple commissioning and low maintenance requirements help lower operating costs for the entire system.

The new system solution consists of three basic modules: highly efficient inverters, versatile DC-Combiner Box and a central inverter manager for all key inverter and system functions.





Provisional Technical Data, 07/2014	MLX 60
Input (DC)	
Max. input voltage	1,000 V
MPP voltage range	570 V to 800 V @400 Vac, 685 V to 800 V @480 Vac
Min. input voltage	565 V @400 Vac, 680 V @480 Vac
Max. input current / Short-circuit current	110 A / 150 A
Number of independent MPP inputs / strings per MPP input	1/1 (split up by external DC-Combiner Box)
Output (AC)	
Rated power at nominal voltage	60,000 W
Max. apparent AC power	60,000 VA
Nominal AC voltage	3 / PE, 400 V to 480 V, +/-10 %
Nominal AC voltage range	400 V to 480 V
AC grid frequency / range	50 Hz / 60 Hz
Rated power frequency / rated grid voltage	50 Hz / 400 V
Max. output current	3 x 87 A
Power factor at rated power / Displacement power factor, adjustable	1 / 0.8 leading... 0.8 lagging
Feed-in phases / connection phases	3 / 3
Efficiency	
Max. efficiency / European weighted efficiency / CEC	98.6 % / 98.0 % / 98.0 %
Protective Devices	
DC-side disconnection device	○
Ground fault monitoring / grid monitoring	● / ●
DC surge arrester (type II) can be integrated	●
DC reverse polarity protection / AC short-circuit current capability / galvanically isolated	● / ● / –
All-pole sensitive residual-current monitoring unit	●
Protection class (as per IEC 62103) / overvoltage category (as per IEC 60664-1)	I / III
General Data	
Dimensions (W / H / D)	570 / 740 / 300 mm (22.4 / 29.1 / 11.8 inch)
Weight	75 kg (165.3 lb)
Operating temperature range	-25°C to +60°C (-13°F to +140°F)
Noise emission, typical	55 dB(A)
Self-consumption (at night)	1 W
Topology / cooling concept	Transformerless / active
Degree of protection (as per IEC 60529)	IP65
Climatic category (as per IEC 60721-3-4)	4K4H
Maximum permissible value for relative humidity (non-condensing)	95 %
Features	
DC connection / AC connection	Screw terminal / Screw terminal
Display	Graphic
Interface	Using external inverter manager: Modbus TCP
Certificates and approvals	MLX 60: IEC 62109-1/IEC 62109-2 (Class I, grounded – communication Class II, PELV), UL1741 – w. Non-Isolated EPS Interactive PV Inverters, IEEE 1547 SMA Inverter Manager: UL 508, UL 60950-1, CSA C22.2 No. 60950-1-07, EN 60950-1, EN 55022 Class A, EN 61000-3-2 Class D, EN 61000-3-3, EN55024, FCC Part 15, Sub-part B Class A
● Standard features ○ Optional features – Not available, data at nominal conditions	
Ordering code	139f5003: MLX 60 EU version with integrated DC-side disconnection device 139f5004: MLX 60 EU version without integrated DC-side disconnection device 139f5001: MLX 60 UL version with integrated DC-side disconnection device 139f5002: MLX 60 UL version without integrated DC-side disconnection device