



SUNNY HIGHPOWER PEAK3

125-US / 150-US



A superior modular solution for large-scale power plants

The PEAK3 1,500 VDC inverter offers high power density in a modular architecture that achieves a cost-optimized solution for large-scale PV integrators. With fast, simple installation and commissioning, the Sunny Highpower PEAK3 is accelerating the path to energization.

SMA has also brought its field-proven Smart Connected technology to the PEAK3, which simplifies O&M and contributes to lower lifetime service costs. The PEAK3 power plant solution is powered by the ennexOS cross sector energy management platform, 2018 winner of the Intersolar smarter E AWARD.

FEATURES:

- Field serviceable
- Snap-In inverter mounting system
- Wireless monitoring
- Design flexibility
- Dynamic peak manager
- Arc Fault Circuit Interruption

Maximum flexibility:

- Scalable 1,500 VDC building block with best-in-class performance
- Flexible architecture creates scalability while maximizing land usage

Highly innovative:

- SMA Smart Connected reduces O&M costs and simplifies field-service
- Powered by award-winning ennexOS cross sector energy management platform

Cost effective:

- Modular architecture reduces BOS and maximizes system uptime
- Compact design and high power density maximizes transportation and logistical efficiency

Simple install, commissioning:

- Ergonomic handling and simple connections enable quick installation
- Centralized commissioning and control with SMA Data Manager

TECHNICAL DATA SUNNY HIGHPOWER PEAK3

INPUT DATA

	Sunny Highpower PEAK3 150-US	Sunny Highpower PEAK3 150-US
Maximum array power	187500 Wp STC	225000 Wp STC
Maximum system voltage	1500 VDC	1500 VDC
Rated MPP voltage range	705 V ... 1450 V	880 V ... 1450 V
M PPT operating voltage range	684 V ... 1500 V	855 V ... 1500 V
M PPT trackers	1	1
Maximum operating input current	180 A	180 A
Maximum input short-circuit current	325 A	325 A

OUTPUT DATA

	Sunny Highpower PEAK3 150-US	Sunny Highpower PEAK3 150-US
Nominal AC power	125000 W	150000 W
Maximum apparent power	125000 VA	150000 VA
Output phases / line connections	3 / 3-PE	3 / 3-PE
Nominal AC voltage	480 V	600 V
Compatible transformer winding configuration	Wye-grounded	Wye-grounded
Maximum output current	151A	151A
Rated grid frequency	60 Hz	60 Hz
Grid frequency / range	50 Hz, 60 Hz / -6 Hz ... +6 Hz	50 Hz, 60 Hz / -6 Hz ... +6 Hz
Power factor at rated power / adjustable displacement	1 / 0.0 leading ... 0.0 lagging	1 / 0.0 leading ... 0.0 lagging
Harmonics (THD)	<3%	<3%

GENERAL DATA

	Sunny Highpower PEAK3 150-US	Sunny Highpower PEAK3 150-US
Device dimensions (W / H / D)	770 / 830 / 444 mm (30.3 / 32.7 / 17.5 in.)	770 / 830 / 444 mm (30.3 / 32.7 / 17.5 in.)
Weight	98 kg (216 lbs)	98 kg (216 lbs)
Operating temperature range	-25 °C ... +60 °C (-13 °F ... +140 °F)	-25 °C ... +60 °C (-13 °F ... +140 °F)
Audible noise emission (full power @ 1m and 25 °C)	< 69 dB(A)	< 69 dB(A)
Internal consumption at night	< 5 W	< 5 W
Cooling	OptiCool (forced convection, variable speed fans)	OptiCool (forced convection, variable speed fans)
Cooling concept	Indoor and outdoor	Indoor and outdoor
Enclosure protection rating	Type 4X (as per UL 50E)	Type 4X (as per UL 50E)
Maximum permissible relative humidity (non-condensing)	100%	100%