

INV500-90

Micro-Wechselrichter

EN



Description

The AEconversion micro inverter INV500-90 converts the generated energy into grid-compliant alternating current. For this purpose, the INV500-90 is directly connected to one or two PV modules. The individual conversion enables optimal utilisation of the solar energy.

The INV500-90 micro-inverter operates up to a power of 700W with a maximum PV input voltage of 90V. It is available in 50Hz and 60Hz and in communication versions: PLC and NoCom.



Input data - PV

- Recommended PV module power: 260W -700W
- Maximum DC voltage: 90V
- Min./max. starting voltage: 40 V / 90 V
- MPP range: 40 V ... 80 V
- Compatible for modules with a max. current of : 14 A

Output data - AC

- AC rated power: 480 W
- Rated current: 2.1 A
- Power factor: > 0.99

Efficiency

- Maximum efficiency: 95,0 %
- European efficiency: 94,0 %
- MPP efficiency: 99,8 %

Mechanical data

- Operating temperature range: -25 °C ... +70 °C
- Nightly energy consumption: 30 mW
- Max. Operating altitude above sea level: 2000 m
- DC connector: MC4 compatible
- Dimensions (WxHxD): 314 mm x 267 mm x 66.5 mm
- Weight: 2.5 kg
- Cooling: Natural convection
- Enclosure material: Aluminium
- Enclosure protection class:
IP65 (50Hz version) / NEMA 4 (60Hz version)

50Hz version

- AC rated voltage: 230 V
- AC voltage range: 184 V ... 264 V
- Rated frequency: 50.0 Hz
- Frequency range: 47.5 Hz ... 51.5 Hz
- Product safety: IEC 62103:2003, IEC 62109-1:2010, IEC 55011B, EN 50178:1997
- EMC: EN 61000-6-2, EN 61000-6-3

60Hz version

- AC rated voltage: 208 V or 240 V
- AC voltage range: 184 V ... 264 V
- Rated frequency: 60.0 Hz
- Frequency range: 59.5 Hz ... 60.3 Hz
- Product safety: UL 1741:2010, IEEE 1547:2003, CSA C22.2
- EMC: FCC Part 15 Class B

Special features

- Communication variants: Powerline / without
- ENS integrated according to VDE AR-N 4105
- Protection class: Class I
- Topology: Transformer/galvanically isolated