

MAC250A - NA



Increased lifetime and reliability (double lifetime)
No single-point failure with system availability of 99%

Maximized energy harvest (Average +16%)
Reduced power loss with shade, dust and debris

Simple design, with Plug and Play chain installation
Improved safety with no high voltage hazards
No indoor bulky and noisy inverter unit

Internet 24h smart monitoring for each PV module

The INVOLAR MAC250 Microinverter offers the latest technology in power inverters. Each Microinverter is connected to one PV module in the solar panel array. Unlike conventional Inverters, in the event of single panel failure the remaining panels continue to produce power.

By performing Maximum Power Point Tracking (MPPT) at PV module level, INVOLAR Microinverters minimize the effects of shading, debris, snow, panel orientation differences and mismatches or PV module aging, improving the system's energy harvest and customer income by an average of 16% over the system lifetime.

With the MAC250 inverter to inverter chain interconnection, which dispenses costly bus cables, even DIY installation is a breeze.

These advantages in combination with a much longer product warranty, enables an INVOLAR Microinverter system to greatly improve the end customer's Return On Investment, system interactivity and overall investment satisfaction.

Technical Specifications

| Model | MAC250A-240-NA |
|-------------------------------------|--|
| Input Data (DC) | |
| Recommended Input Power (STC) | 250W/200W~260W* |
| DC voltage operating range | 20V~50V |
| MPPT Voltage Range | 24V~40V |
| Maximum DC Current | 10.4A |
| Output Data (AC) | |
| Rated AC Power @ 25°C | 235W |
| Rated AC Current | 0.98A |
| AC voltage Range | 240V/211V~264V |
| AC frequency | 60Hz/59.3Hz~60.5Hz |
| Power Factor | >0.99 |
| Current THD | <3.5% |
| Maximum Units Per Branch | 16 |
| Efficiency | |
| Peak Inverter Efficiency | 95.2% |
| CEC Weighted Efficiency | 94.1% |
| Nighttime Power Consumption | <170mW |
| Mechanical Data | |
| Enclosure Environmental Rating | Outdoor - NEMA6 |
| Operating Temperature Range | -40°C~+65°C |
| Dimensions (WxHxD) | 230mm x 195mm x 35mm |
| Weight | 2.44kg |
| Features | |
| Microinverter chain interconnection | Only a string termination cable is required |
| PV Panel type | Mono/Polycrystalline Si 60/72 cells* |
| PV Panel DC connector | MC4 |
| Communication | PLCC with eGate/eLog unit |
| Compliance | ETL - UL1741/IEEE1547 - CE - EN50438 - ENEL - VDE0126 - G83/1 - CQC - AS4777 |
| Warranty | 15 Years |

*Prior to installation please inform INVOLAR on panel model to be used.

The MAC250A is the most flexible microinverter on the market, if another panel type is required please contact INVOLAR for further information.

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