

POWER INVERTER 4.0 | 5.0 | 6.0



GRID-TIED-INVERTERS FOR RESIDENTIAL AND COMMERCIAL INSTALLATIONS

HIGH EFFICIENCY

- Two independent MPP-trackers, switchable to parallel mode
- Fast and precise MPP-tracking over whole power range
- Transformerless topology
- Overall efficiency > 98 %

UNIQUE FLEXIBILITY

"Fits all"-technology allows all types of modules, all string layouts and all roofs (orientation, shading) without loss of efficiency

- Allows up to 100 % power imbalance of MPP-trackers
- Possible input voltage range between 150 V and 1000 V
- Maximum input current: 2 x 12 A

EASY INSTALLATION

- Pre-installed parameters for different grid standards
- Integrated grid management functions
- Dynamic output power control
- Toolless DC- and AC-connector

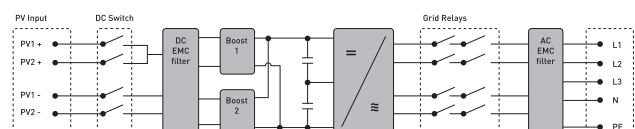
USER FRIENDLY COMMUNICATION

- Multi-information LCD-display
- WiFi, LAN and APP for touchless setup and initial operation
- Integrated data monitoring and alerts via APP
- Multi-function communication board for connection of various devices

ROBUST DESIGN

- Efficient heat sink: Silent, maintenance free fanless cooling
- Compact and lightweight hardware design
- Durable aluminium housing
- IP65 protection: Suitable for indoor and outdoor installation

BLOCK DIAGRAM



YOUR LOCAL MERCHANT

INFORMATION & DISTRIBUTION



| Power Inverter | 4.0 | 5.0 | 6.0 |
|----------------|-------------|-------------|-------------|
| Order Number | IXP040N1AE0 | IXP050N1AE0 | IXP060N1AE0 |

DC-INPUT

| | | | |
|-----------------------------|--------------------------------------|-----------------|-----------------|
| Max. recommended DC power | 5000 W | 6250 W | 7500 W |
| MPPT | 2 (paralleling possible) | | |
| Input per MPPT | 1 | | |
| Maximum DC current per MPPT | 12 A (24 A in parallel mode) | | |
| Rated DC voltage | 700 V | | |
| DC start up voltage / power | 150 V / 25 W | | |
| DC voltage range | 140 V ... 1000 V | | |
| MPP voltage range | 200 V ... 800 V | 220 V ... 800 V | 265 V ... 800 V |
| Maximum voltage DC | 1000 V | | |
| Connectors type | Weidmüller PV-Stick (MC4 compatible) | | |

AC-OUTPUT (GRID MODE)

| | | | |
|-----------------------------------|--|---------|---------|
| Rated AC output power | 4000 W | 5000 W | 6000 W |
| Maximum active power | 4000 W | 5000 W | 6000 W |
| Maximum apparent power | 6300 VA | 6300 VA | 6300 VA |
| Nominal AC current per phase | 5,8 A | 7,3 A | 8,7 A |
| Maximum AC current per phase | 9,1 A | 9,1 A | 9,1 A |
| Rated frequency | 50 Hz / 60 Hz | | |
| Frequency range | 45 Hz ... 65 Hz | | |
| Max. switch-on current | 13 A, 0,1ms | | |
| Max. fault current (RMS) | 285 mA | | |
| Rated AC voltage | 230V / 400 V (L1, L2, L3, N, PE) | | |
| AC voltage range | 180V ... 270V | | |
| Total harmonic distortion (THD) | < 2% at rated power | | |
| Reactive power factor (cos phi) | 1 (adjustable range 0,8 cap....0,8 ind) | | |
| Anti-islanding operation | Yes | | |
| Earth fault protection | RCD | | |
| DC current injection | < 0,5% In | | |
| Required phases, grid connections | 3 (L1, L2, L3, N, PE) | | |
| Number of feed-in phases | 3 | | |
| Grid voltage monitoring | 3-phase | | |
| Type of AC connection | Spring clamps | | |

PERFORMANCE

| | | | |
|------------------------|-----------------|-------|-------|
| Stand-by consumption | < 4,0 W | | |
| Night-time consumption | < 1 W | | |
| Maximum efficiency | 98,16% | | |
| European efficiency | 97,6% | 97,7% | 97,9% |
| Topology | Transformerless | | |

OTHER

| | |
|-------------------------------------|---|
| DC-switch | Integrated |
| DC overvoltage category | II |
| AC overvoltage category | III |
| Data interface | WiFi, LAN, RS485, Multifunctional dry contact, 4 x digital in, 2 x digital in/out |
| Display | LCD dot matrix 128 x 64 with backlight |
| Cooling | Convection |
| IP degree of protection | IP 65 |
| Max. operating altitude | 2000 m |
| Max. relative humidity | 4 - 100% (non condensing) |
| Typical noise | < 35 dB |
| Operating temperature range | -25°C ... 60°C (40° at full load) |
| Type of installation | Wall mounting |
| Dimensions (height x width x depth) | 570 x 440 x 200 mm |
| Weight | 22 kg |

SAFETY / STANDARDS

| | |
|--------------------|--|
| Safety class | 1 |
| Overload behaviour | Working point adjustment |
| Certificates | CE, VDE-AR-N 4105:2011-08, EN 50438 |
| EMC | EN61000-6-2, EN61000-6-3, EN61000-3-2, EN61000-3-3 |
| Safety | EN/IEC62109-1, EN/IEC62109-2 |