

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

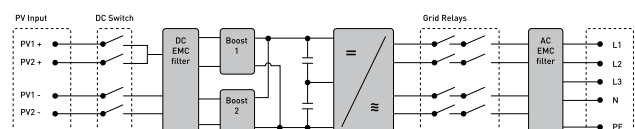
USER FRIENDLY COMMUNICATION

- Multi-information LCD-display
- WiFi 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
- Toolless DC- and AC-connector

BLOCK DIAGRAM



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
Rated DC power	4200 W	5250 W	6300 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 protection	Category II
AC overvoltage protection	Category III
Data interface	WIFI, optional: 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