



# POWER STORAGE AC 4.0 | 6.0

AC-COUPLED BATTERY INVERTER FOR  
THE EXPANSION OF PV-SYSTEMS

## HIGH EFFICIENCY

- Transformerless topology
- Maximum self-consumption by battery management based on PV- and load forecast
- High voltage battery input

## UNIQUE FLEXIBILITY

Optimised for retrofitting battery storage to existing PV-plants

- 3-phase output
- Battery input fits for 2 to 6 RCT Power battery modules
- Maximum charge or discharge current: 20A
- Maximum charge and discharge power up to 6kW

## EASY INSTALLATION

- Pre-installed parameters for different grid-standards
- Integrated grid management functions
- Dynamic output power control

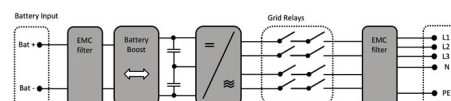
## USER FRIENDLY COMMUNICATION

- Multi-information LCD-display
- WiFi, LAN and APP operation without internet
- Integrated data monitoring and alerts via APP
- Multi-function communication board for connection of various devices
- Intelligent energy storage management

## 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
- Tool-less connection of DC and AC

## BLOCK DIAGRAM



## INFORMATION & DISTRIBUTION

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**Power Storage AC****4.0****6.0**

Order Number

IAP040N1AE0

IAP060N1AE0

**BATTERY-INPUT**

DC voltage range	120 V ... 600 V	
Maximum charge / discharge current	20 A / 20 A	
Maximum charge / discharge power	4000 W	6000 W
Connector type	Weidmüller PV-Stick (MC4 compatible)	

**AC-OUTPUT**

Rated AC output power	4000 W	6000 W
Maximum active power	4000 W	6000 W
Maximum apparent power	6300 VA	6300 VA
Nominal AC current per phase	5,8 A	8,7 A
Maximum AC current per phase	9,1 A	9,1 A
Rated frequency	50 Hz / 60 Hz	
Frequency range	45 Hz ... 65 Hz	
Max. switch-on current	13 A, 0,1 ms	
Max. fault current (RMS)	285 mA	
Rated AC voltage	230 V / 400 V (L1, L2, L3, N, PE)	
AC voltage range	180 V ... 270 V	
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% I <sub>n</sub>	
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
Maximum efficiency (battery - grid)	96,62%
Maximum efficiency (grid-battery)	96,41%
Topology	Transformerless

**OTHERS**

DC overvoltage protection	Type II
AC overvoltage protection	Type 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	IP65
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
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