

IQ Battery 5P

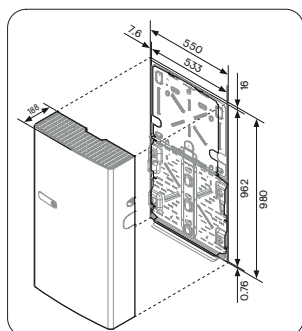
IQ Battery 5P is an all-in-one AC-coupled system that is powerful, reliable, simple, and safe. It has a total usable energy capacity of 5.0 kWh and includes six embedded IQ8D-BAT Microinverters providing up to 3.84 kVA continuous power. It provides backup capability when combined with IQ System Controller 3 INT. Installers can quickly design the system size as per the requirements.



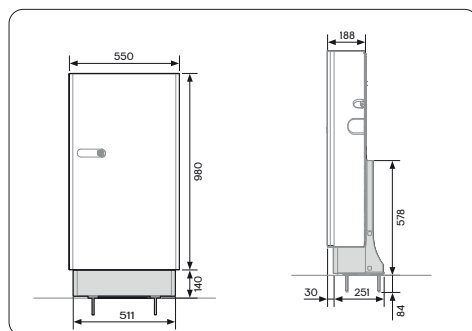
Key specifications

Rated (continuous) output apparent power	3.84 kVA
Rated output current	16.7 A
Interconnection	Single-phase
Nominal AC voltage	230 V _{L-N}
Nominal frequency	50 Hz
Usable capacity	5.0 kWh
Ambient operating temperature range	-20°C to 55°C
Chemistry	Lithium iron phosphate (LFP)
Mounting	Wall-mount/pedestal-mount

Dimensions in mm



Wall-mounted (included)



Floor-mounted with pedestal (sold separately)

Powerful

- Delivers up to 3.84 kVA continuous and 7.68 kVA peak power (in backup)
- Includes six embedded IQ8D-BAT Microinverters for reliable performance

Reliable

- 15-year limited warranty
- Passive cooling-no moving parts
- Uses wired control communication
- Remote software and firmware updates

Simple

- AC-coupled system for fast installation and commissioning
- Supports Backup, Self-Consumption, and TOU modes
- Monitor and control via the Enphase App
- Field replaceable components

Safe

- Evaluated to UL 9540A, the highest industry standard for battery safety
- Uses lithium iron phosphate (LFP) chemistry for safety and longevity

Product details	IQ Battery 5P
Order code	IQBATTERY-5P-1P-INT
Description	The IQ Battery 5P with integrated IQ8D-BAT Microinverters and battery management system (BMS) with battery controller
Output	@230 VAC
Rated (continuous) output apparent power	3.84 kVA
Nominal AC voltage	230 V _{L-N}
Nominal AC voltage range	184–264 V _{L-N}
Nominal frequency	50 Hz
Nominal frequency range	47.5–52.5 Hz
Rated output current	16.7 A
Peak output current (3 seconds, 10 seconds)	33.4 A, 26.7 A
Power factor (grid-tied)	0.8 leading ... 0.8 lagging
Power factor (off-grid)	1.0 leading ... 1.0 lagging
Maximum short-circuit current	32 A _{rms} , 3 cycles
Peak short-circuit current	488 A _{rms} , 12 μs
Maximum output overcurrent protection	20 A per unit
Inverter topology	Isolated (HF transformer)
Interconnection	Single-phase
Protection class	I
Overvoltage category	III
AC round-trip efficiency ¹	90%
Operating modes	Self-Consumption, Full Backup, and time-of-use (TOU)
Battery module	
Usable capacity	5.0 kWh
DC round-trip efficiency ²	96%
Nominal DC voltage	76.8 V
Ambient operating temperature range (charging) ³	–20°C to 50°C non-condensing
Ambient operating temperature range (discharging) ⁴	–20°C to 55°C non-condensing
Optimum operating temperature range	0°C to 30°C
Chemistry	Lithium iron phosphate (LFP)
Mechanical data	
Dimensions (H × W × D)	980 mm × 550 mm × 188 mm
Lifting weight	68.5 kg
Total installed weight	82
IP rating—IQ Battery	IP55

¹ AC to the battery to AC at 50% power rating at 25°C (at the beginning of life).

² At the beginning of life.

³ A reduction in charging power occurs at temperatures below 15°C and above 45°C.

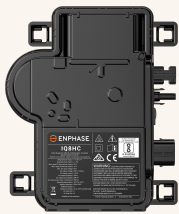
⁴ A reduction in discharging power occurs at temperatures below 5°C and above 50°C.

Mechanical data	
IP rating—IQ8D-BAT Microinverter	IP67
Cooling	Natural convection
Altitude	<2000 m
Mounting	Wall-mount (included) or pedestal-mount (sold separately)
Communication interfaces	
Installation location	Indoor/Outdoor
Communication	Wired control communication
Monitoring	Enphase Installer Platform, Enphase App, and API integration
Standards	
Performance	IEC 61683, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-14, IEC 60068-2-30, IEC 61727
Safety	UN 38.3, UL 9540A, IEC 62109-1 & 2, IEC 62116, IEC 62909-1
EMC	IEC 61000-3-2, IEC 61000-3-3, IEC 61000-6-2, IEC 61000-6-3, IEC 61000-6-4
Limited warranty	
Limited warranty	>60% capacity, up to 15 years or 6000 cycles ⁵
What's in the box	
IQ Battery 5P	Base battery unit of IQ Battery 5P with six integrated IQ8D-BAT Microinverters
ID cover and conduit cover	IQ Battery 5P cover with two conduit covers for the left and right sides of the unit
Bottom mounting bracket and top protective shield	Bottom mounting bracket for mounting the battery on the wall and one top protective shield
M5 locking screws	Two M5 locking screws for securing the battery unit on the bottom mounting bracket
M4 grounding screws	Two M4 grounding screws for securing the top shield on the bottom mounting bracket
M5 ID cover grounding screws	Two M5 ID cover grounding screws for the EMI/EMC requirement
Cable ties	Six cable ties for securing field cables to the unit
Control (CTRL) connector	One pre-installed and one spare CTRL connector without resistor for CTRL wiring
Control (CTRL) connector with resistor	One pre-installed and one spare CTRL connector with resistor for CTRL wiring
Quick install guide (QIG)	IQ Battery 5P installation instructions
Drill template	Two drill templates for marking drilling locations on the mounting surface
Accessories and replacement parts	
IQ8D-BAT-RMA	IQ8D-BAT Microinverter for field replacement
B05-T02-INT00-1-2-RMA	IQ Battery 5P battery unit for field replacement
B05-CX-0550-O	IQ Battery 5P cover for field replacement
B05-PM-0550-O	IQ Battery 5P Pedestal Mount
B05-CP-096-O	IQ Battery 5P conduit plates for field replacement. Includes one left-side and one right-side conduit plate
B05-WB-0543-O	IQ Battery 5P wall bracket for field replacement. Includes one bottom mounting bracket and one top shield
IQBATTERY-HNDL-5	IQ Battery 5P Lifting Handles. Includes one left-side and one right-side lifting handle

⁵ Whichever occurs first. Restrictions apply. The full text of the warranty is available at <https://enphase.com/installers/resources/warranty>.

Accessories and replacement parts	
B05-ACFB-080-O	IQ Battery 5P AC filter board for field replacement
B05-BMSIA-0490-O	IQ Battery 5P BMS board for field replacement
B05-CANBR-063-O	IQ Battery 5P control communication board for field replacement
B05-IICS-0524-O	IQ Battery 5P control switch pre-installed on the wiring cover for field replacement
Compatibility	
IQ System Controller 3 INT (for backup operation)	SC100G-M230INT
Solar inverters	IQ Series Microinverters

Components of the Enphase Energy System



IQ Microinverters

IQ Series Microinverters pack more power into less space than other rooftop solar systems and make rooftop solar more productive, reliable, smart, and safe.



IQ System Controller 3 INT

IQ System Controller 3 INT connects the home to grid power, the IQ Battery storage system, and solar PV. It provides microgrid interconnect device (MID) functionality by automatically detecting and seamlessly transitioning the home energy system from grid power to backup power in the event of a grid failure.



IQ Battery 5P accessories

IQ Battery 5P Lifting Handles are reusable and ease the installation process. The IQ Battery 5P Pedestal Mount enables floor mounting of the IQ Battery 5P.

Revision history

Revision	Date	Description
DSH-00537-4.0	November 2024	Removed the preliminary tag. Updated the specifications.
DSH-00537-3.0	September 2024	Updated the warranty information.
DSH-00537-2.0	September 2024	Updated the nominal voltage range in the "Key specifications" and the "Output (AC)" sections.
DSH-00537-1.0	August 2024	Preliminary release.