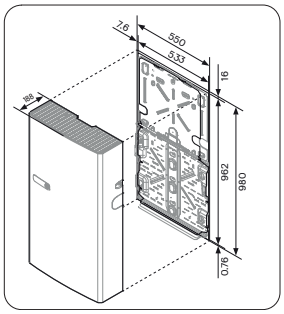
INDIA DATA SHEET

IQ Battery 5P

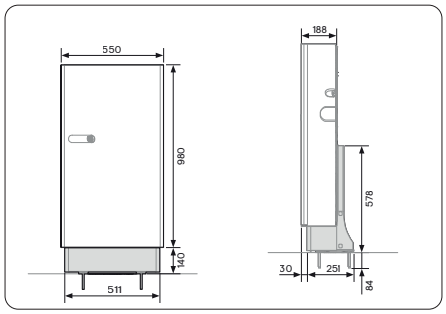
IQ Battery 5P is an all-in-one AC-coupled system that is powerful, reliable, simple, and safe. It has a total usable energy capacity of 5.0 kWh and includes six embedded IQ8D-BAT Microinverters providing up to 3.84 kVA continuous power. It provides backup capability when combined with IQ System Controller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

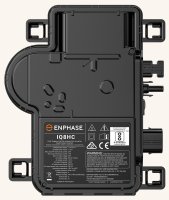
Accessories and replacement parts	
IQ8D-BAT-RMA	IQ8D-BAT Microinverter for field replacement
B05-T02-INT00-1-2-RMA	IQ Battery 5P battery unit for field replacement
B05-CX-0550-O	IQ Battery 5P cover for field replacement
B05-PM-0550-O	IQ Battery 5P Pedestal Mount
B05-CP-096-O	IQ Battery 5P conduit plates 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.

Manufacturer: Enphase Energy Inc., 47281 Bayside Pkwy., Fremont, CA, 94538, United States of America, PH: +1 (707) 763-4784
Importer: Enphase Solar Energy Pvt. Ltd., IndiQube Golf View Homes, Ward No: 73 Airport, NAL Wind Tunnel Main Road, Bangalore-560017, PH: +91-80-6117-250
Assembled in China.

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.

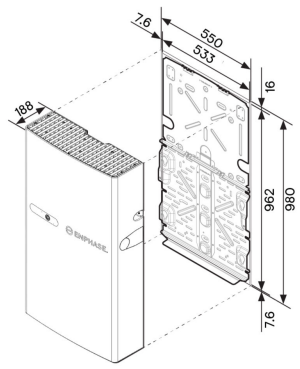
IQ Battery 5P with FlexPhase

The IQ Battery 5P with FlexPhase is an all-in-one AC-coupled system that is powerful, reliable, simple, and safe. The battery can be used flexibly in both single-phase and three-phase applications. It has a total usable energy capacity of 5.0 kWh and includes six embedded IQ8T-BAT Microinverters providing up to 3.84 kVA continuous power in single-phase configuration and up to 1.28 kVA continuous power per phase in three-phase configuration.

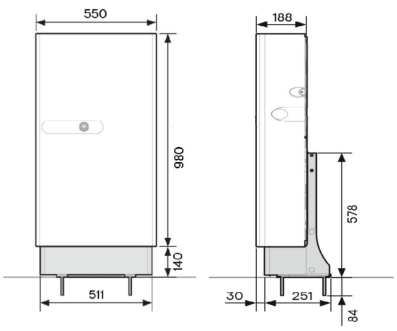
CE

Key specifications	Single-phase	Three-phase
Rated (continuous) output power[1]	Up to 3.84 kVA	Up to 3.84 kVA (1.28 kVA per phase)
Rated output current	Up to 16.7 A	Up to 16.7 A (5.56 A per phase)
Nominal AC voltage	230 V_{L-N}	230 V_{L-N}, 400 V_{L-L}
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



Floor-mounted with pedestal

[1] There are multiple models. Refer to the following page for model-specific ratings.

Powerful

- Provides continuous power of up to 3.84 kVA (single-phase) or up to 1.28 kVA per phase (three-phase)
- Includes six IQ8T-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 Self-Consumption, Full Backup, and Savings mode (Time-of-Use)
- CEC listed product and battery rebate approved
- Monitor and control via the Enphase App
- Field replaceable components

Safe

- Evaluated to UL 9540A, the highest industry standard for battery safety
- Lithium Iron Phosphate (LFP) chemistry for safety and longevity

Product details	IQ Battery 5P with FlexPhase
Order code	IQBATTERY-5P-3P-INT
Description	The IQ Battery 5P with FlexPhase is an AC-coupled battery (convertible between single-phase and three-phase)[2] with integrated IQ8T-BAT Microinverters and a battery management system (BMS) with battery controller

Output	Single-phase configurations[3]				
Rated (continuous) output apparent power	1.65 kVA	2.50 kVA	3.00 kVA	3.68 kVA	3.84 kVA
Rated output current	7.17 A	10.87 A	13.04 A	16 A	16.7 A
Peak output current (10 seconds, 3 seconds)[4]	11.5 A, 14.3 A	17.4 A, 21.7 A	20.9 A, 26.1 A	25.6 A, 32 A	26.7 A, 33.4 A
Nominal AC voltage	230 V_{L-N}				
Nominal AC voltage range	184–264 V_{L-N}				

Output	Three-phase configurations[3]				
Rated (continuous) output apparent power	1.84 kVA	2.50 kVA	3.00 kVA	3.68 kVA	3.84 kVA
Per phase rated (continuous) output apparent power	0.61 kVA	0.83 kVA	1 kVA	1.23 kVA	1.28 kVA
Rated output current	8 A	10.87 A	13.04 A	16 A	16.7 A
Per phase rated output current	2.67 A	3.62 A	4.35 A	5.33 A	5.56 A
Peak output current (10 seconds, 3 seconds)[4]	12.8 A, 16 A	17.4 A, 21.7 A	20.9 A, 26.1 A	25.6 A, 32 A	26.7 A, 33.4 A
Per phase peak output current (10 seconds, 3 seconds)[4]	4.27 A, 5.33 A	5.8 A, 7.23 A	6.97 A, 8.7 A	8.53 A, 10.67 A	8.9 A, 11.13 A
Nominal AC voltage	400 V_{L-L}				
Nominal AC voltage range	319 V_{L-L}–457 V_{L-L}				

Output	
Nominal frequency	50 Hz
Nominal frequency range	47.5–52.5 Hz
Power factor, grid-tied	0.8 leading ... 0.8 lagging
Power factor, backup	1.0 leading ... 1.0 lagging
AC round-trip efficiency[5]	90%
Operating modes	Supports Self-Consumption, Full Backup[6], and Savings mode (Time-of-Use)

Battery module	
Usable capacity[7]	5.0 kWh
DC round-trip efficiency[8]	96%
Nominal DC voltage	76.8 V
Ambient operating temperature (charging)[9]	-20°C to 50°C
Ambient operating temperature (discharging)[10]	-20°C to 55°C

[2] Factory default configuration is set to single-phase. To switch to a three-phase configuration, refer to the instructions provided in the quick installation guide (QIG).
[3] Power and Current rating can be configured using the Enphase Installer App during the commissioning.
[4] During backup operation.
[5] AC to the battery to AC at 50% power rating at 25°C (at the beginning of life). Actual round-trip efficiencies can vary based on ambient temperatures, load patterns, and other external factors.
[6] IQ System Controller 3 INT is required for backup operation.
[7] The battery's usable capacity supports loads, and turns PV on (when off-grid), in normal daily operation. The usable capacity includes a safety critical limit of 2% that safeguards the customer's asset in case of a long-duration grid outage. An additional 3% capacity is maintained for battery electronic sustenance during the night. Refer to https://link.enphase.com/iq-battery-usable-capacity-tech-brief for more information.
[8] At the beginning of life.
[9] Reduction in charging power will occur at temperatures below 15°C and above 45°C.
[10] Reduction in discharging power will occur at temperatures below 5°C and above 50°C.

Battery module	
Chemistry	Lithium iron phosphate (LFP)
Mechanical data	
Dimensions (H × W × D)	980 mm × 550 mm × 188 mm
Lifting weight	69.5 kg
Total installed weight	83 kg
IP rating - IQ Battery	IP55
IP rating - IQ8T-BAT Microinverter	IP67
Cooling	Natural convection
Altitude	<2000 m
Mounting	Wall-mount (included) or pedestal-mount (sold separately)
Installation location	Indoor/Outdoor
Communication interfaces	
Communication	Wired control communication (Enphase recommended control cables)
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
EMC	IEC 61000-3-2, IEC 61000-3-3, IEC 61000-6-2, IEC 61000-6-3, IEC 61000-6-4
Safety	UN 38.3, UL 9540A, IEC 62109-1 & 2, IEC 62116, IEC 62909-1
Limited warranty	
Limited warranty	>60% capacity, up to 15 years or 6000 cycles[11]
What's in the box (Order code: IQBATTERY-5P-3P-INT)	
IQ Battery 5P with FlexPhase	Base battery unit of IQ Battery 5P with FlexPhase with six integrated IQ8T-BAT Microinverters
ID cover and conduit cover	IQ Battery ID cover along with four conduit covers, two each for the left and right sides of the unit
Bottom mounting bracket and top protective shield	Bottom mounting bracket for mounting the battery unit 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 protective shield on the bottom mounting bracket
M5 ID cover grounding screws	Two M5 ID cover grounding screws for fixing ID cover to battery base unit
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 with FlexPhase installation instructions
Control (CTRL) drain connector	One pre-installed and one spare CTRL drain connector for CTRL wiring

[11] Whichever occurs first. Restrictions apply. The full text of the warranty is available at https://enphase.com/installers/resources/warranty.

What's in the box (Order code: IQBATTERY-5P-3P-INT)	
Drill template	One drill template for marking drilling locations on the mounting surface

Accessories and replacement parts	
IQBATTERY-5P-3P-INT-RMA	IQ Battery 5P with FlexPhase unit for field replacement
B305-CX-0550-O	IQ Battery 5P cover only (includes one ID cover)
B305-CP-0140-O	IQ Battery 5P conduit plates only (includes four conduit covers, two each for the left and right sides of the unit)
B05-WB-0543-O	IQ Battery 5P wall bracket only (includes one wall bracket and one top shield)
B05-PM-0550-O	IQ Battery 5P Pedestal Mount
IQBATTERY-HNDL-5	One set of IQ Battery 5P Lifting Handles (includes one left-side and one right-side lifting handle)
B305-ACFB-200-O	IQ Battery 5P AC filter board only (includes AC filter board PCBAs)
B305-BMSIA-0490-O	IQ Battery 5P BMS board only (includes one BMS board PCBA of INT)
B305-IICS-0524-O	IQ Battery 5P in-house control switch only. Includes one in-house control switch preinstalled on the IQ Battery 5P wiring cover (INT)
B305-CANBI-042-O	IQ Battery 5P control communications board only (includes one control communications PCBA)
IQ8T-BAT-RMA	Enphase IQ8T-BAT Microinverter for IQ Battery 5P with FlexPhase for field replacement
B305-TBL-077-O	IQ Battery 5P Line terminal block
B305-TBN-077-O	IQ Battery 5P Neutral terminal block
B305-TBG-077-O	IQ Battery 5P Ground terminal block
B305-FUSE-0005-O	IQ Battery 5P fuse
B305-TBJ-085-O	IQ Battery 5P jumper

Compatibility	
IQ Gateway Metered	ENV-S-WM-230
IQ System Controller 3 INT (for backup operation)	SC100G-M230INT
Solar inverters	IQ Series Microinverters, third-party PV string inverters[12]

Manufacturer: Enphase Energy Inc., 47281 Bayside Pkwy., Fremont, CA, 94538, United States of America, PH: +1 (707) 763-4784
Importer: Enphase Solar Energy Pvt. Ltd., IndiQube Golf View Homes, Ward No: 73 Airport, NAL Wind Tunnel Main Road, Bangalore-560017, PH: +91-80-6117-250
Assembled in China.

[12] Refer to the systems planning guide for more information on using third-party PV string inverters with IQ System Controller 3 INT in grid-tied systems.

Components of the Enphase Energy System

IQ System Controller 3 INT

The system controller is an integrated enclosure containing all components necessary for backup operation in case of grid outage.

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 Battery 5P with FlexPhase accessories

The lifting handles are reusable and ease the installation process.

The pedestal enables floor mounting of the battery.

Revision history

Revision	Date	Description
DSH-00818-2.0	September 2025	Initial release.
DSH-00818-1.0	July 2025	Preliminary release.

ENPHASE

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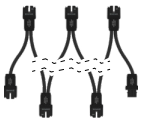
IQ Gateway Metered

The IQ Gateway Metered is the platform for energy management and integrates with the IQ Microinverters to provide complete control and insights into the Enphase Energy System. The IQ Gateway Metered delivers solar production and energy consumption data to the Enphase App monitoring and analysis software for comprehensive, remote maintenance and management of the Enphase Energy System.

IQ Microinverters

High-powered smart grid-ready IQ7+ and IQ7A Microinverters dramatically simplify the installation process while achieving the highest system performance.

IQ Relay three-phase
A grid-monitoring and disconnection device with a built-in phase coupler to distribute power line communications (PLC) signals across phases.



IQ Cabling
Install microinverters quickly and safely with IQ Cabling.

Smart

- Enables web-based monitoring and control
- Bidirectional communication with IQ Microinverters and the Enphase Cloud for remote upgrade

Simple

- Easy system configuration using the Enphase Installer App
- Flexible networking with Wi-Fi, Ethernet, or cellular data
- DIN rail mounted

Reliable

- Designed for installation indoors or in an outdoor enclosure
- Five-year warranty

Enphase 5 year limited warranty

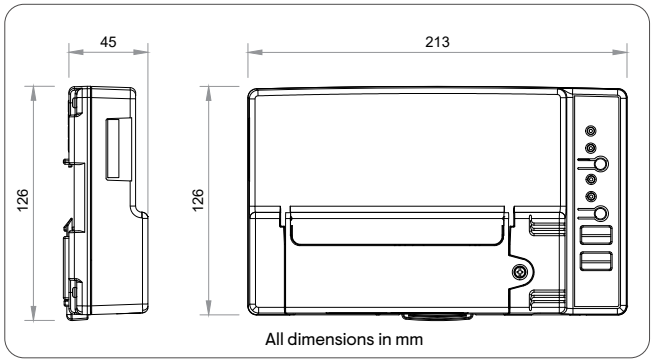
CE

IQ Gateway Metered

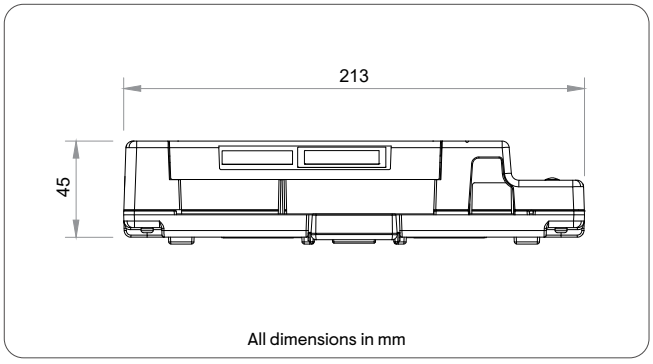
PRODUCT DETAILS	UNITS	ENV-S-WM-230
Name		IQ Gateway Metered
Description		Communications gateway with integrated PV and consumption metering. Includes two CTs (200 A primary circuit current).
Power measurment accuracy		Production and consumption meter: ±1% accuracy
POWER REQUIREMENTS	**UNITS**	
Nominal grid voltage	V	230 (L-N), 230/400 (L-N/L-L) Wye
Minimum/Maximum grid voltage	V	184/276
Nominal frequency	Hz	50
Minimum/Maximum frequency	Hz	45/55
Maximum overcurrent protection	A	10 (characteristic C)
Maximum power consumption	W	5
Average continuous power consumption	W	3
CAPACITY	**UNITS**	
Maximum number of microinverters polled		Up to 300**
MECHANICAL DATA	**UNITS**	
Dimensions (H x W x D)	mm	126 x 213 x 45
Mounting		DIN rail
DIN rail units width	modules	12
Weight	kg	0.5
Ambient air temperature range	℃	-40 to 65 (if installed outdoors), -40 to 46 (if installed in an enclosure)
Relative humidity	%	85
Overvoltage class AC port		III
Overvoltage class relay port		II
Environmental rating		IP30. If installed outdoors, use an outdoor-rated enclosure.
Maximum altitude	m	2500
USB ports		Two USB 2.0 ports, auto-sensing, auto-negotiation
AC terminal block		N, L1, L2, L3 up to 6 mm^2
CT terminal block		6 double terminals, up to 1.5 mm^2
Digital I/O terminal block		5 terminals, up to 1.5 mm^2
COMMUNICATION INTERFACES	**UNITS**	
Integrated Wi-Fi		802.11b/g/n (2.4 GHz, 5 GHz), for connecting the the Enphase Cloud via the internet.
Wi-Fi range (recommended)	m	10
Ethernet		Optional, 802.3, Cat5E (or Cat 6) UTP Ethernet cable (not included), for connecting to the Enphase Cloud via the internet.
Mobile		Optional, CELLMODEM-02 (not included)
Digital I/O		Digital input/output for grid operator control
USB 2.0		For Mobile Connect
Access point (AP) mode		For a connection between the IQ Gateway and a mobile device running the Enphase Installer App
Metering ports		Up to three Consumption CTs, Up to three Production CTs
Power line communication		Power line communication (PLC) 110 – 120 kHz (Class B), narrow band 200 Hz, to microinverters, and IQ Relay

** Depends on geographic location and site configuration.

COMMUNICATION INTERFACES	UNITS	
Web API		Refer to https://developer-v4.enphase.com
Local API		Refer to guide for local API
LED indicators		From top to bottom: Cloud connectivity, Wi-Fi access point mode, PV production state, PLC communications state
Configured via		Enphase Installer App, Enphase Installer Platform
COMPLIANCE STANDARDS	**UNITS**	**ENV-S-WM-230**
Grid compliance		IEC 62109-1, IEC-62109-2/IS 16221; IEC 61727
Safety		EN 61010-1:2010, EN61010-2:2010,
EMC		IEC/EN 61010-1:2010, EN50065-1, EN61000-4-5, EN61000-6-1, EN61000-6-2
RED standard		EN62311:2008
Product labelling		CE
SCOPE OF DELIVERY	**UNITS**	
Package dimensions (H x W x D)	mm	160 x 276 x 98
Package weight	kg	1
Aluminium DIN rail	mm	125
Current Transformers (CTs)		2 x CT-100-SPLIT included



All dimensions in mm



All dimensions in mm

IQ Gateway Metered accessories (order separately)

CT-100-SPLIT
Current Transformers (CTs)

Pack of four 200 A rated split-core current transformer (CT), with accuracy ±1%.
For use with IQ Gateway Metered in multi-phase applications or with larger section conductors.

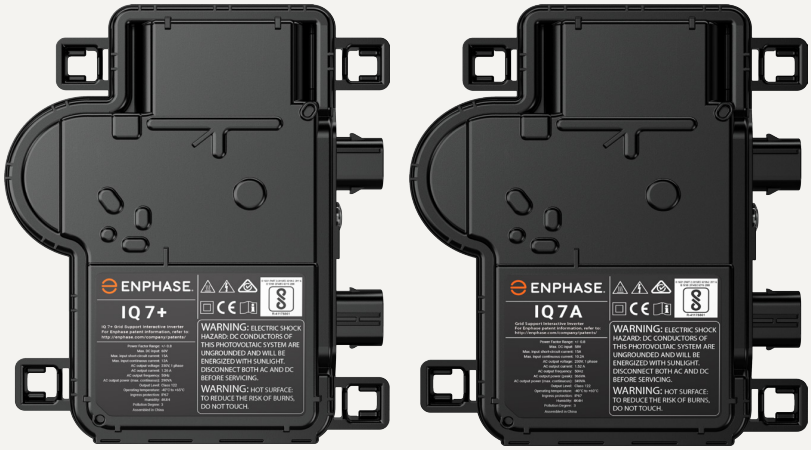
Assembled in China or India.

Manufacturer: Enphase Energy, Inc. 47281 Bayside Pkwy., Fremont, CA 94538, United States, PH: +1 707 763 4784

Enphase Solar Energy Pvt. Ltd., IndiQube Golf View Homes, Ward No.73 Airport, NAL Wind Tunnel Main Road, Murugeshpalaya, Bangalore-560 017, PH: +91-80-6117-2500

INDIA

DATA SHEET



IQ7+ and IQ7A Microinverters

The high-powered smart grid-ready IQ7+ and IQ7A Microinverters dramatically simplify the installation process while achieving the highest system performance.

IQ Gateway

Part of the Enphase Energy System, IQ7 Microinverters integrate with the IQ Gateway and the Enphase App monitoring and analysis software.

IQ Relay three-phase

For production circuit in both single-phase and three-phase systems, integrated NS-protection device with PLC-Phase coupler (three-phase).

Q-DCC-2 Adapter Cable

Connect PV modules quickly and easily to IQ7 Series Microinverters using the included Q-DCC-2 adapter cable with plug-and-play MC4 connectors.

IQ Cables

The IQ Cables allow quick and safe connection of the microinverters.

Enphase 10 year limited warranty

IQ7 Series Microinverters redefine reliability standards with more than one million cumulative hours of power-on testing, enabling an industry-leading limited warranty of up to 10 years**.

Easy to install

- Lightweight and compact with plug-n-play connectors
- Power line communication (PLC) between components
- Familiar AC cabling architecture

High productivity and reliability

- More than one million cumulative hours of testing
- Class II double-insulated enclosure
- Safer AC cabling methods

Smart grid-ready

- Complies with the latest advanced grid support
- Remote automatic updates for the latest grid requirements
- Configurable to support a wide range of grid profiles

*IQ Relay is required to protect the PV system from grid abnormalities.
**10 years warranty is valid, provided an internet-connected IQ Gateway is installed. Get in touch with the Enphase team for warranty extension options.

IQ7+ and IQ7A Microinverters

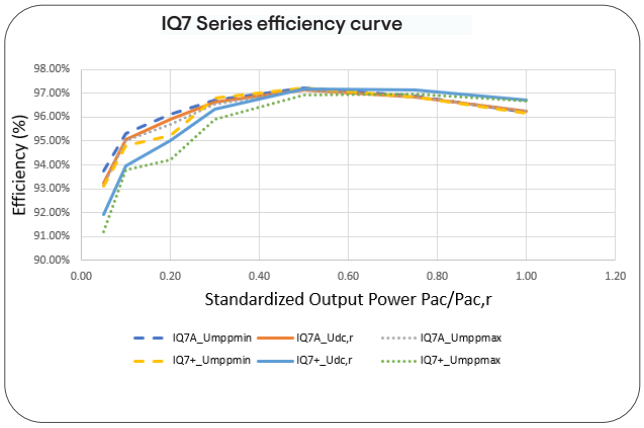
INPUT DATA (DC)		UNITS	IQ7PLUS-72-2-INT	IQ7A-72-2-INT
Typical module compatibility			60-cell/120 half-cell 66-cell/132 half-cell 72-cell/144 half-cell	60-cell/120 half-cell 66-cell/132 half-cell 72-cell/144 half-cell
			No enforced DC/AC ratio and maximum input power. Modules can be paired as long as the maximum input voltage is not exceeded and the maximum input current of the inverter at the lowest and highest temperatures is respected. See the compatibility calculator at https://www4.enphase.com/en-in/support-module-compatibility-en.	
Minimum/Maximum input voltage	U_{dcmin}/U_{dcmax}	V	16/60	18/58
Start-up input voltage	$U_{dcstart}$	V	22	33
Rated input voltage	$U_{dc,r}$	V	36	40.5
Minimum/Maximum MPP voltage	U_{mppmin}/U_{mppmax}	V	27/45	38/43
Minimum/Maximum operating voltage	U_{opmin}/U_{opmax}	V	16/60	18/58
Maximum input current	I_{dcmax}	A	12	10.2
Maximum short-circuit DC input current	I_{scmax}	A	25	25
Maximum module Isc		A	20	20
Maximum input power***	P_{dcmax}	W	440	550
OUTPUT DATA (AC)		**UNITS**	**IQ7PLUS-72-2-INT**	**IQ7A-72-2-INT**
Maximum apparent power	$S_{ac,max}$	VA	295	366
Rated power	$P_{ac,r}$	W	290	349
Nominal grid voltage	U_{acnom}	V	230	
Minimum/Maximum grid voltage	U_{acmin}/U_{acmax}	V	184/276	
Maximum output current	I_{acmax}	A	1.28	1.59
Nominal frequency	f_{nom}	Hz	50	
Minimum/Maximum frequency	f_{min}/f_{max}	Hz	45/55	
Maximum units per single/ multi-phase 20 A circuit	16 A/I_{acmax}		12 (L+N)/36 (3L+N)	10 (L+N)/30 (3L+N)
			For IQ Cable with 2.5 mm^2 stranded conductors and using a 1.25 safety factor, 16 A per phase is calculated as maximum current according to IEC 60364. The Safety factors applied may vary based on local regulations or best practices, also upon the characteristic the OCPD selected.	
Protective class (all ports)			II	
Total harmonic distortion		%	<5	
Power factor setting			1.0	
Power factor range	cosphi		0.8 leading–0.8 lagging	
Inverter maximum efficiency	η_{max}	%	97.2	
IS/IEC 61683 efficiency	η_{IS}	%	97	96.6
Inverter topology			Isolated (HF Transformer)	
Night-time power loss		mW	50	

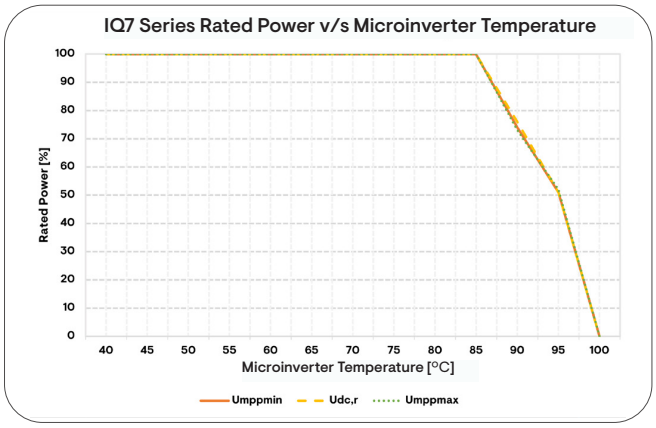
MECHANICAL DATA	IQ7PLUS-72-2-INT	IQ7A-72-2-INT
Ambient air temperature range	-40°C to 65°C (-40°F to 149°F)	-40°C to 60°C (-40°F to 140°F)
Relative humidity range	4% to 100% (condensing)	
Overvoltage class AC port	III	
Number of input DC connectors (pairs) per single MPP-tracker	1	
AC connector type	Enphase IQ Cabling (refer to separate datasheet for cable and accessories)	
DC connector type	Staubli MC4 (using Q-DCC-2 adapter)	

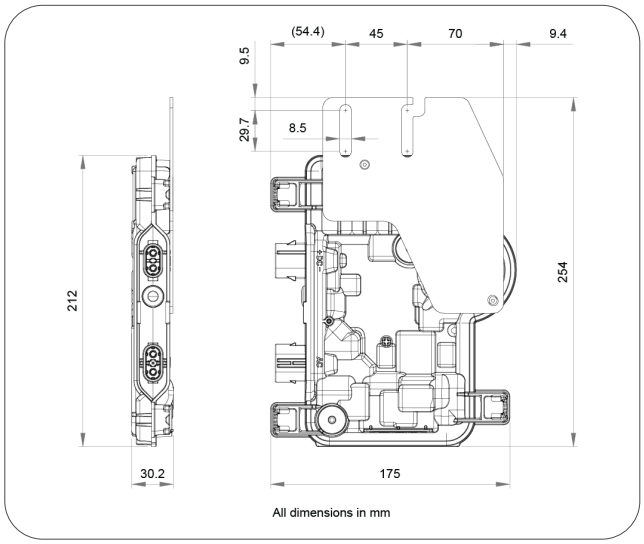
***The maximum input power values are recommended to address region-specific requirements.

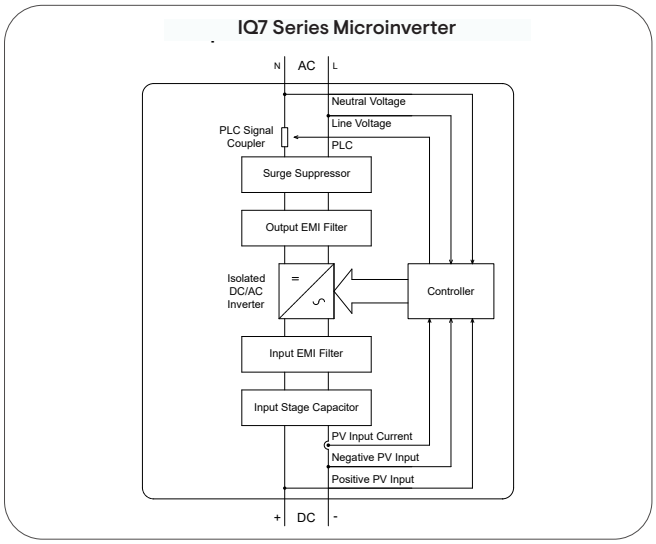
MECHANICAL DATA	IQ7PLUS-72-2-INT	IQ7A-72-2-INT
Dimensions (H×W×D)	212 mm (8.3") × 175 mm (6.9") × 30.2 mm (1.2") (without mounting brackets)	
Weight (with mounting plate)	1.08 kg (2.38 lbs)	
Cooling	Natural convection–no fans	
Enclosure	Class II double-insulated, corrosion-resistant polymeric enclosure	
IP Rating	Outdoor-IP67	
Maximum altitude	2,600 m	
Calorific value	37.5 MJ/unit	
COMPLIANCE	**IQ7PLUS-72-2-INT**	**IQ7A-72-2-INT**
Grid compliance	IEC 62109-1, IEC 62109-2/IS 16221; IEC 61727	
Safety	EN IEC 62109-1, EN IEC 62109-2	
Anti-Islanding	IEC 62116/IS 16169	
EMC	EN IEC 61000-3-2, 61000-3-3, 61000-6-2, 61000-6-3, EN IEC 50065-1, 50065-2-1	
Product labelling	CE & BIS	
Advanced grid functions[1]	power export limiting (PEL), phase imbalance management (PIM), loss of phase detection (LOP), power factor control Q (U), cos (phi) (P)	
Microinverter communication	Powerline communication (PLC) 110–120 kHz (Class B), Narrow band 200 Hz	

(1) Some of these functions require IQ Gateway Metered with current transformers and/or IQ Relay installed.







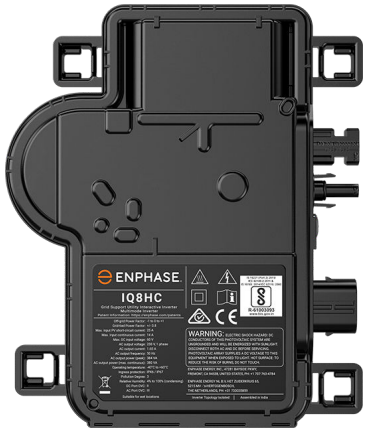


Assembled in China, India, and Mexico.

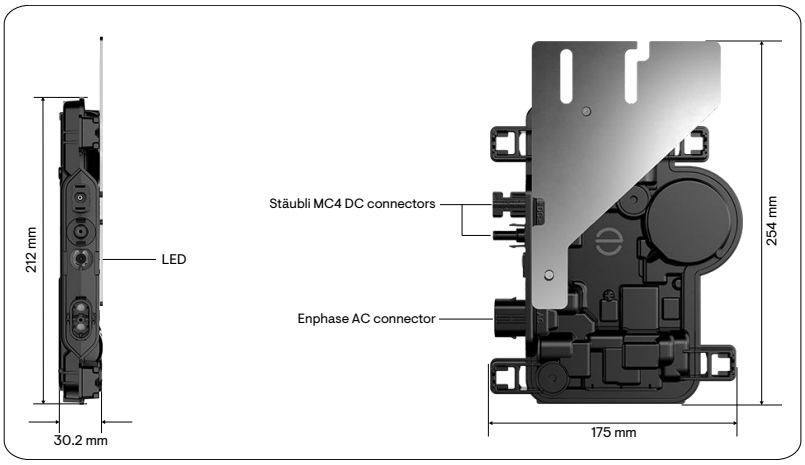
Enphase Solar Energy Pvt. Ltd. IndiQube Golf View Homes Ward No.73 Airport, NAL Wind Tunnel Main Road, Murugeshpalaya, Bangalore-560 017. Tel: +91-80-6117-2500

IQ8 Series Microinverters

The high-powered, smart grid-ready IQ8 Series Microinverters are designed to match the latest generation high-output PV modules. The IQ8 Series Microinverter has the highest energy production and reliability standards in the industry, and with rapid shutdown functionality, it meets the highest safety standards.[1, 2]



Key specifications	IQ8HC-72-M-INT
Max. apparent power	384 VA
Nominal grid voltage	230 V
Nominal frequency	50 Hz
IS/IEC 61683 weighted efficiency	96.7%
Min./Max. voltage	18/60 V
Min./Max. MPP voltage	29.5/45 V
Max. short-circuit DC input current	25 A
Ambient air temperature range	–40°C to 65°C (–40°F to 149°F)



Easy

- Compatible with existing IQ7 systems. Seamlessly expand your solar capacity as your energy requirements increase[1, 2]
- Lightweight and compact with integrated Stäubli MC4 connectors for easy installation
- Fast installation with simple AC cabling
- Faster firmware upgrades enabled by the new integrated circuit technology

Reliable

- More than 1 million power-on hours of reliability testing
- Patented Burst Mode technology provides increased energy production
- Low-voltage DC and rapid shutdown for the ultimate fire safety
- Industry-leading warranty of up to 15 years, extendable to 20 or 25 years[3]

Compatible

- Supports all common PV module powers and cell architecture

[1] IQ8 Series Microinverters can be added to the existing IQ7 systems on the same IQ Gateway in Solar Only grid-tied configurations.
[2] IQ7 Series Microinverters cannot be added to a site with existing IQ8 Series Microinverters on the same gateway.
[3] 15-year warranty is valid, provided an internet-connected IQ Gateway and IQ Relay are installed. Get in touch with the Enphase team for warranty extension options.

Input data (DC)	Parameters	Units	IQ8HC-72-M-INT
Typical module compatibility	–	–	54-cell/108-half-cell, 60-cell/120-half-cell, 66-cell/132-half-cell, 72-cell/144-half-cell. No enforced DC/AC ratio and maximum input power. Modules can be paired as long as the maximum input voltage is not exceeded and the maximum input current of the inverter is respected at the lowest and highest temperatures. See the compatibility calculator at https://enphase.com/en-in/installers/microinverters/calculator.
Min./Max. voltage	Udcmin/ Udcmax	V	18/60
Startup input voltage	Udcstart	V	22
Min./Max. MPP voltage	Umppmin/ Umppmax	V	29.5/45
Min./Max. operating voltage	Uopmin/ Uopmax	V	18/58
Max. input current	Idcmax	A	14
Max. short-circuit DC input current	Iscmax	A	25 Maximum short-circuit current for modules (Isc) allowed being paired with IQ8HC Microinverters: 20 A
Max. input power[4]	Pdcmax	W	560

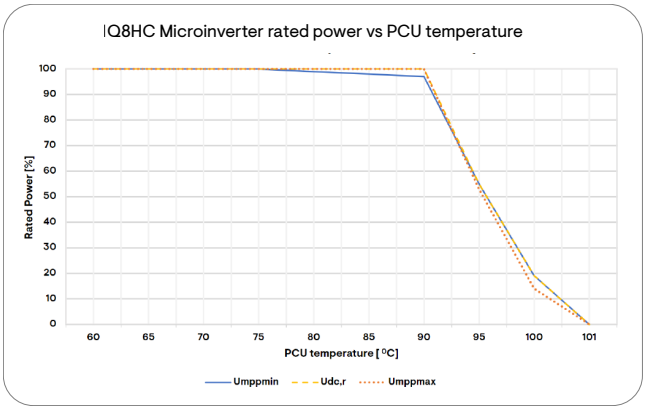
Output data (AC)	Parameters	Units	IQ8HC-72-M-INT
Max. apparent power	Sac,max	VA	384
Rated power	Pac,r	W	380
Nominal grid voltage	Uacnom	V	230
Min./Max. grid voltage	Uacmin/ Uacmax	V	184/276
Max. output current	Iacmax	A	1.67
Nominal frequency	fnom	Hz	50
Min./Max. frequency	fmin/fmax	Hz	45/55
Max. units per single-phase/three-phase 20 A circuit	16 A/ Iacmax	–	9 (L+N)/27 (3L+N) For IQ Cable with 12 AWG stranded conductors designed with NEC 2023 India standard and using a 1.25 safety factor, 16 A per phase is calculated as the maximum current according to NEC 2023 India requirements. Breaker selection should be determined by “Circuit current < Breaker rated current < Cable current capacity”.
Protective class (all ports)	–	–	II
Total harmonic distortion	–	%	<5
Power factor setting	–	–	1.0
Power factor range	cos phi	–	0.8 leading ... 0.8 lagging
Inverter maximum efficiency	ηmax	%	97.4
IS/IEC 61683 weighted efficiency	η	%	96.7
Inverter topology	–	–	Isolated (HF transformer)
Night-time power loss	–	mW	50

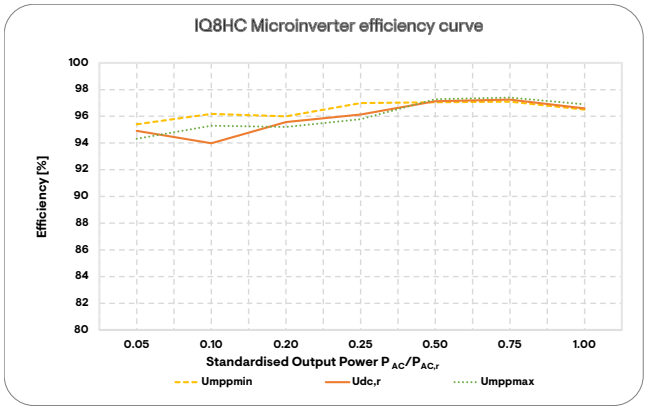
[4] Pairing PV modules with wattage above the limit may result in additional clipping losses. See the compatibility calculator at https://enphase.com/en-in/installers/microinverters/calculator.

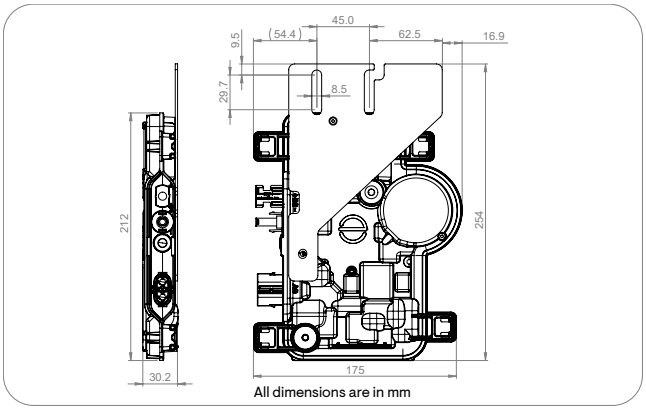
Mechanical data	IQ8HC-72-M-INT
Ambient air temperature range	–40°C to 65°C (–40°F to 149°F)
Relative humidity range	4% to 100% (condensing)
Overvoltage class AC port	III
Number of input DC connectors (pairs) per single MPP tracker	1
AC connector type	IQ Cabling (refer to the IQ Cable and accessories data sheet)
DC connector type	Stäubli MC4
Dimensions (H × W × D)	212 mm (8.3") × 175 mm (6.9") × 30.2 mm (1.2") (without mounting brackets)
Weight (with mounting plate)	1.1 kg (2.4 lb)
Cooling	Natural convection – no fans
Enclosure	Class II double-insulated, corrosion-resistant polymeric enclosure
IP rating	Outdoor - IP67
Altitude	<2600 m

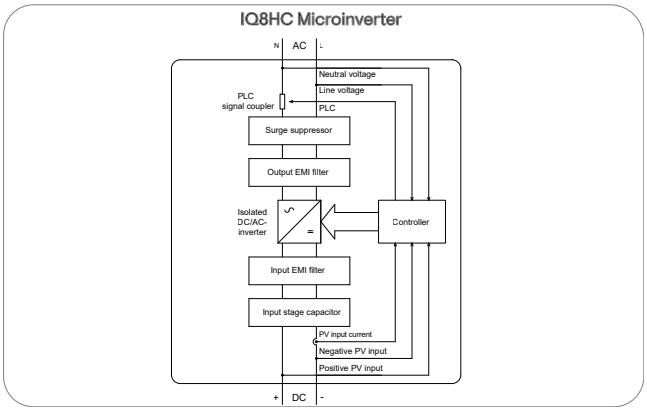
Standards	IQ8HC-72-M-INT
Grid compliance	IEC61727
Safety	EN IEC 62109-1, EN IEC 62109-2
EMC	EN IEC 61000-3-2, 61000-3-3, 61000-6-2, 61000-6-3, EN IEC 50065-1, 50065-2-2, EN 55011[5]
Product labelling	CE, RCM and BIS
Advanced grid functions[6]	Power export limiting (PEL), phase imbalance management (PIM), loss of phase detection (LOP), power factor control Q (U), cos (phi) (P)
Microinverter communication	Power line communication (PLC) 110–120 kHz (Class B), narrowband 200 Hz

[5] At STC within the MPP range.
[6] Some of these functions require IQ Gateway Metered with current transformers and/or IQ Relay installed.









Assembled in China, India, or U.S.
Manufacturer: Enphase Energy Inc. 47281 Bayside Pkwy, Fremont, CA 94538, United States of America, Tel: +1 (707) 763-4784
Importer: Enphase Solar Energy Pvt. Ltd., IndiQube Golf View Homes, Ward No: 73 Airport, NAL Wind Tunnel Main Road, Bangalore-560017. Tel: +91-80-6117-2500

Components of the Enphase Energy System

IQ Battery

All-in-one AC-coupled storage solution that integrates seamlessly with your solar energy system, providing reliable backup power and intelligent energy management for maximum performance and energy savings.

IQ Gateway

The IQ Gateway is a device that performs energy management, provides internet connectivity, and integrates with the IQ Series Microinverters to provide complete control and insights into the Enphase Energy System.[7]

IQ Cabling

Install microinverters quickly and safely with IQ Cabling.

IQ Relay

For production circuits in both single-phase and three-phase systems. IQ Relay acts as a grid monitoring and disconnection device and includes a built-in PLC phase coupler (three-phase).[8]

[7] 15-year warranty is valid, provided an internet-connected IQ Gateway and IQ Relay are installed. Get in touch with the Enphase team for warranty extension options.
[8] IQ Relay is mandatory to protect the PV system from grid abnormalities.

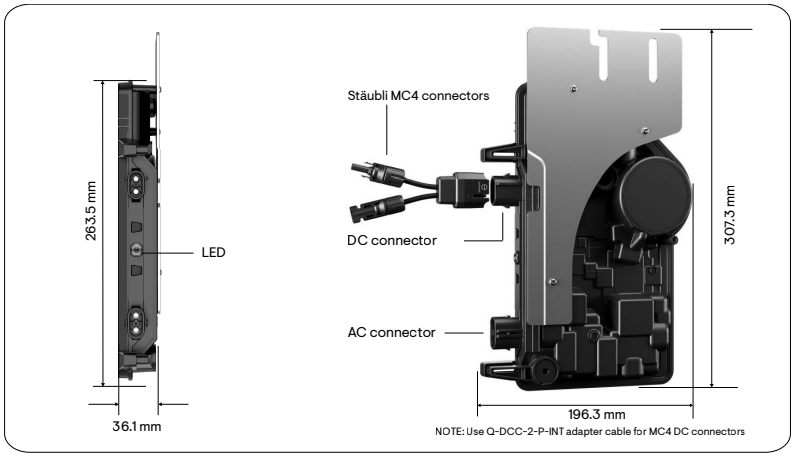
Revision history

Revision	Date	Description
DSH-00071-4.0	June 2025	Updated the introduction.
DSH-00071-3.0	May 2025	Updated information on backward compatibility with IQ7 Series Microinverters.
DSH-00071-2.0	September 2023	Updated the module comparability calculator link.
DSH-00071-1.0	August 2023	Preliminary release.

IQ8P Microinverter

The IQ8P Microinverter[1, 2] is a high-powered, 480 VA rated, smart-grid ready microinverter designed to match the larger format residential and commercial PV modules. The IQ8P Microinverter has the highest energy production and reliability standards in the industry, and with Rapid Shutdown functionality, it meets the highest safety standards.

Key specifications	IQ8P-72-2-INT
Maximum AC output power	480 W
Nominal grid voltage	230 V
Nominal frequency	50 Hz
European weighted efficiency	97.0%
Minimum/Maximum input voltage	16/65 V
Minimum/Maximum MPP voltage	36/55 V
Maximum short-circuit DC input current	25 A
Ambient temperature range	–40°C to 65°C (–40°F to 149°F)



Simple

- Compatible with existing IQ7 systems. Seamlessly expand your solar capacity as your energy requirements increase[1]
- Lightweight and compact
- Fast installation with simple AC cabling
- New integrated circuit technology enables faster firmware upgrades

Reliable

- More than one million power-on hours of reliability testing
- Patented Burst Mode technology provides increased energy production
- Low-voltage DC and Rapid Shutdown for the ultimate fire safety
- Industry-leading limited warranty of up to 15 years[3]

Compatible

- Supports the latest high-current PV modules up to 670 Wp
- Supports all common PV module powers and cell architectures

[1] IQ8 Series Microinverters can be added to the existing IQ7 systems on the same IQ Gateway in Solar Only grid-tied configurations.
[2] IQ7 Series Microinverters cannot be added to a site with existing IQ8 Series Microinverters on the same gateway.
[3] 15-year warranty is valid, provided an internet-connected IQ Gateway is installed. Get in touch with the Enphase team for warranty extension options.

Input data (DC)	Parameters	Units	IQ8P-72-2-INT
Typical module compatibility	—	—	60-cell/120-half-cell, 66-cell/132-half-cell, 72-cell/144-half-cell, 78-cell/156-half-cell. No enforced DC/AC ratio and maximum input power. Modules can be paired as long as the maximum input voltage is not exceeded and the maximum input current of the inverter at the lowest and highest temperatures is respected. See the compatibility calculator at https://enphase.com/en-in/installers/microinverters/calculator.
Minimum/Maximum input voltage	U_{dcmin}/U_{dcmax}	V	16/65
Start-up input voltage	$U_{dcstart}$	V	22
Rated input voltage	$U_{dc,r}$	V	45.5
Minimum/Maximum MPP voltage	U_{mppmin}/ U_{mppmax}	V	36/55
Minimum/Maximum operating voltage	U_{opmin}/U_{opmax}	V	16/65
Maximum input current	I_{dcmax}	A	14
Maximum short-circuit DC input current	I_{scmax}	A	25 Maximum short circuit current for modules (I_{sc}) allowed to be paired with IQ8P Microinverters: 20 A (calculated with 1.25 safety factor as per IEC 62548).
Maximum input power[4]	P_{dcmax}	W	670

Output data (AC)	Parameters	Units	IQ8P-72-2-INT
Maximum apparent power	$S_{ac,max}$	VA	480
Rated power	$P_{ac,r}$	W	475
Nominal grid voltage	U_{acnom}	V	230
Minimum/Maximum grid voltage	$U_{ac,min}/U_{ac,max}$	V	184/276
Maximum output current	$I_{ac,max}$	A	2.09
Nominal frequency	f_{nom}	Hz	50
Minimum/Maximum frequency	f_{min}/f_{max}	Hz	47/55
Maximum units per single/ multi-phase 20 A circuit	16 A/I_{acmax}	—	7 (L+N)/21 (3L+N) For IQ Cable with 2.5 mm^2 stranded conductors and using a 1.25 safety factor, 16 A per phase is calculated as the maximum current according to IEC 60364. The safety factor applied may vary based on the local regulations or best practices, as well as upon the characteristics the OCPD selected.
Maximum units per single/ multi-phase IQ Cable section	—	—	7 (L+N)/15 (3L+N) Centre feeding is the best practice. These design limits should ensure voltage rise and line conductor resistance on the IQ Cable are maintained within acceptable limits. In locations with a risk of high grid voltage at the point of connection, it may be necessary to decrease the maximum number of microinverters on the IQ Cable section by as much as 50%.
Protective class (all ports)	—	—	II

[4] Pairing PV modules with wattage above the limit may result in additional clipping losses. See the compatibility calculator at https://enphase.com/en-in/installers/microinverters/calculator.

Output data (AC)	Parameters	Units	IQ8P-72-2-INT
Total harmonic distortion	—	%	<5
Power factor setting	—	—	1.0
Power factor range	cos phi	—	0.80 leading ... 0.80 lagging
Inverter maximum efficiency	η_{max}	%	97.3
IS/IEC	η	%	97.0
Inverter topology	—	—	Isolated (HF Transformer)
Nighttime power loss	—	mW	100

Mechanical data	Units	IQ8P-72-2-INT
Ambient air temperature range	°C (°F)	-40 to 65 (-40 to 149)
Relative humidity range	%	4 to 100 (condensing)
Overvoltage class AC port	—	III
Number of input DC connectors (pairs) per single MPP-tracker	—	1
AC connector type	—	IQ Cabling (refer to the IQ Cabling and accessories data sheet)
DC connector type	—	Supplied with Stäubli MC4 adapter (Q-DCC-2-P-INT)
Dimensions (H × W × D)	mm (in)	263.5 (10.4) × 196.3 (7.7) × 36.1 (1.4) (without mounting brackets)
Weight (with mounting plate)	kg (lb)	1.6 (3.5)
Cooling	—	Natural convection – no fans
Enclosure	—	Class II double-insulated, corrosion-resistant polymeric enclosure
IP rating	—	Outdoor - IPX6/IP67
Altitude	m (ft)	2600 (8530)
Calorific value	MJ/unit	59.25

Standards	IQ8P-72-2-INT
Grid compliance (with IQ Relay)	IEC 61727
Safety	EN IEC 62109-1, EN IEC 62109-2
EMC	EN IEC 61000-3-2, 61000-3-3, 61000-6-2, 61000-6-3, EN IEC 50065-1, 50065-2-2, EN 55011[5]
Product labelling	CE, RCM, BIS
Advanced grid functions[6]	Power export limiting (PEL), phase imbalance management (PIM), loss of phase detection (LOP), power factor control Q (U), cos (phi) (P)
Microinverter communication	Power line communication (PLC) 110–120 kHz (Class B), narrowband 200 Hz

[5] At STC within MPP range.
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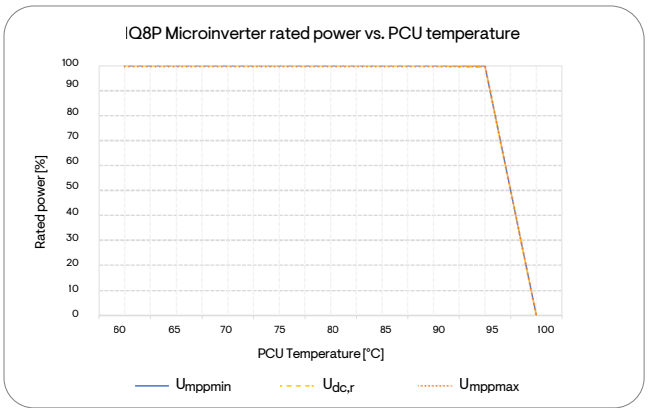

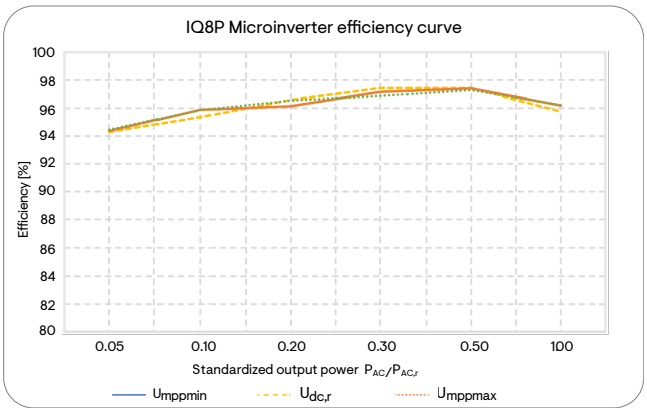

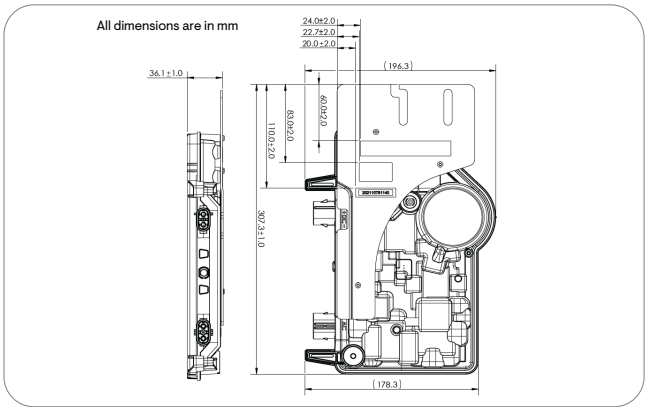

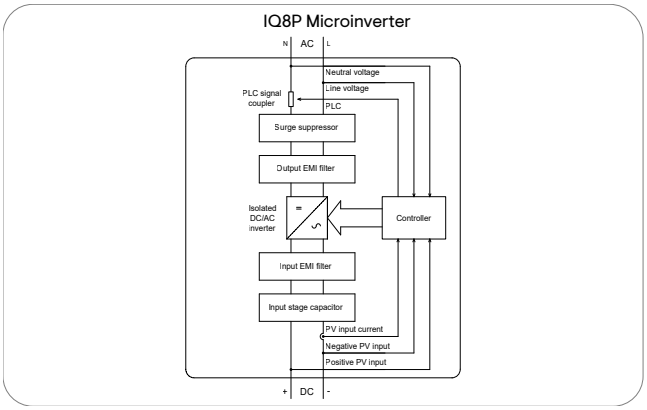

Assembled in India
Manufacturer: Enphase Energy, Inc. 47281 Bayside Pkwy., Fremont, CA 94538, United States of America, PH: +1 (707) 763-4784
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IQ Cable

IQ Cable enables IQ Series Microinverters to be installed quickly and safely.

IQ Relay three-phase

For production circuits in both single-phase and three-phase systems. IQ Relay acts as a grid monitoring and disconnection device and includes a built-in PLC phase coupler (three-phase).[8]

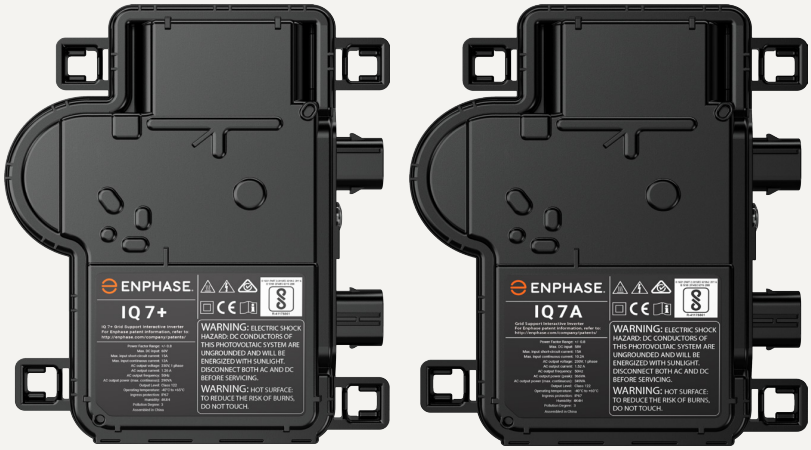
[7] 15-year warranty is valid, provided an internet-connected IQ Gateway is installed. Get in touch with the Enphase team for warranty extension options.
[8] IQ Relay is required to protect the PV system from grid abnormalities.

Revision history

Revision	Date	Description
DSH-00055-5.0	June 2025	Updated the introduction and components information.
DSH-00055-4.0	May 2025	Updated information on backward compatibility with IQ7 Series Microinverters.
DSH-00055-3.0	March 2024	Removed the preliminary tag and updated the Enphase App version to 3.34.x on page 1.
DSH-00055-2.0	September 2023	Updated Maximum short-circuit DC input current parameter to correctly reference to IQ8P.
DSH-00055-1.0	August 2023	Preliminary release.

INDIA

DATA SHEET



IQ7+ and IQ7A Microinverters

The high-powered smart grid-ready IQ7+ and IQ7A Microinverters dramatically simplify the installation process while achieving the highest system performance.

IQ Gateway

Part of the Enphase Energy System, IQ7 Microinverters integrate with the IQ Gateway and the Enphase App monitoring and analysis software.

IQ Relay three-phase

For production circuit in both single-phase and three-phase systems, integrated NS-protection device with PLC-Phase coupler (three-phase).

Q-DCC-2 Adapter Cable

Connect PV modules quickly and easily to IQ7 Series Microinverters using the included Q-DCC-2 adapter cable with plug-and-play MC4 connectors.

IQ Cables

The IQ Cables allow quick and safe connection of the microinverters.

Enphase 10 year limited warranty

IQ7 Series Microinverters redefine reliability standards with more than one million cumulative hours of power-on testing, enabling an industry-leading limited warranty of up to 10 years**.

Easy to install

- Lightweight and compact with plug-n-play connectors
- Power line communication (PLC) between components
- Familiar AC cabling architecture

High productivity and reliability

- More than one million cumulative hours of testing
- Class II double-insulated enclosure
- Safer AC cabling methods

Smart grid-ready

- Complies with the latest advanced grid support
- Remote automatic updates for the latest grid requirements
- Configurable to support a wide range of grid profiles

*IQ Relay is required to protect the PV system from grid abnormalities.
**10 years warranty is valid, provided an internet-connected IQ Gateway is installed. Get in touch with the Enphase team for warranty extension options.

IQ7+ and IQ7A Microinverters

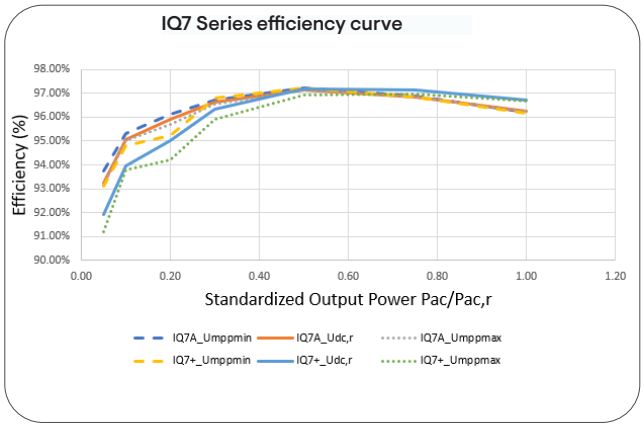
INPUT DATA (DC)		UNITS	IQ7PLUS-72-2-INT	IQ7A-72-2-INT
Typical module compatibility			60-cell/120 half-cell 66-cell/132 half-cell 72-cell/144 half-cell	60-cell/120 half-cell 66-cell/132 half-cell 72-cell/144 half-cell
			No enforced DC/AC ratio and maximum input power. Modules can be paired as long as the maximum input voltage is not exceeded and the maximum input current of the inverter at the lowest and highest temperatures is respected. See the compatibility calculator at https://www4.enphase.com/en-in/support-module-compatibility-en.	
Minimum/Maximum input voltage	U_{dcmin}/U_{dcmax}	V	16/60	18/58
Start-up input voltage	$U_{dcstart}$	V	22	33
Rated input voltage	$U_{dc,r}$	V	36	40.5
Minimum/Maximum MPP voltage	U_{mppmin}/U_{mppmax}	V	27/45	38/43
Minimum/Maximum operating voltage	U_{opmin}/U_{opmax}	V	16/60	18/58
Maximum input current	I_{dcmax}	A	12	10.2
Maximum short-circuit DC input current	I_{scmax}	A	25	25
Maximum module Isc		A	20	20
Maximum input power***	P_{dcmax}	W	440	550
OUTPUT DATA (AC)		**UNITS**	**IQ7PLUS-72-2-INT**	**IQ7A-72-2-INT**
Maximum apparent power	$S_{ac,max}$	VA	295	366
Rated power	$P_{ac,r}$	W	290	349
Nominal grid voltage	U_{acnom}	V	230	
Minimum/Maximum grid voltage	U_{acmin}/U_{acmax}	V	184/276	
Maximum output current	I_{acmax}	A	1.28	1.59
Nominal frequency	f_{nom}	Hz	50	
Minimum/Maximum frequency	f_{min}/f_{max}	Hz	45/55	
Maximum units per single/ multi-phase 20 A circuit	16 A/I_{acmax}		12 (L+N)/36 (3L+N)	10 (L+N)/30 (3L+N)
			For IQ Cable with 2.5 mm^2 stranded conductors and using a 1.25 safety factor, 16 A per phase is calculated as maximum current according to IEC 60364. The Safety factors applied may vary based on local regulations or best practices, also upon the characteristic the OCPD selected.	
Protective class (all ports)			II	
Total harmonic distortion		%	<5	
Power factor setting			1.0	
Power factor range	cosphi		0.8 leading–0.8 lagging	
Inverter maximum efficiency	η_{max}	%	97.2	
IS/IEC 61683 efficiency	η_{IS}	%	97	96.6
Inverter topology			Isolated (HF Transformer)	
Night-time power loss		mW	50	

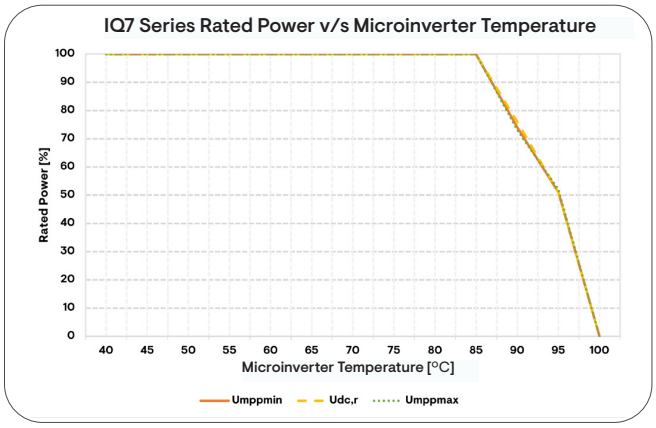
MECHANICAL DATA	IQ7PLUS-72-2-INT	IQ7A-72-2-INT
Ambient air temperature range	-40°C to 65°C (-40°F to 149°F)	-40°C to 60°C (-40°F to 140°F)
Relative humidity range	4% to 100% (condensing)	
Overvoltage class AC port	III	
Number of input DC connectors (pairs) per single MPP-tracker	1	
AC connector type	Enphase IQ Cabling (refer to separate datasheet for cable and accessories)	
DC connector type	Staubli MC4 (using Q-DCC-2 adapter)	

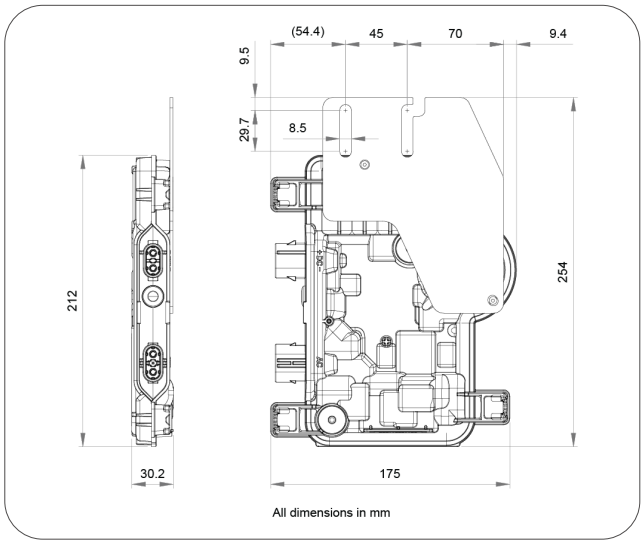
***The maximum input power values are recommended to address region-specific requirements.

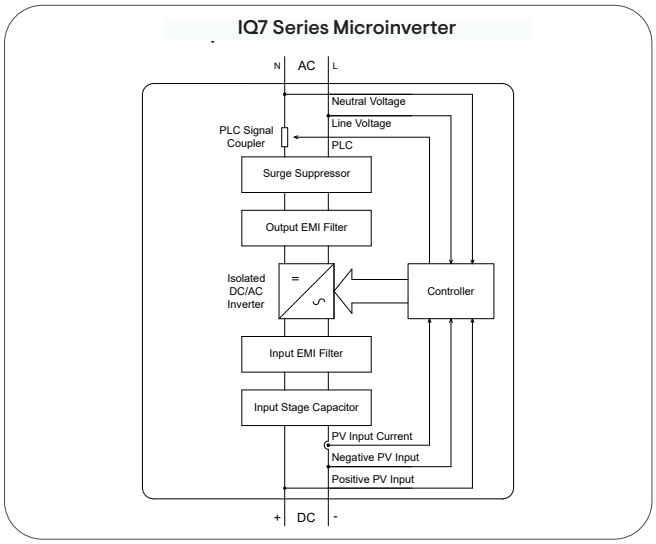
MECHANICAL DATA	IQ7PLUS-72-2-INT	IQ7A-72-2-INT
Dimensions (H×W×D)	212 mm (8.3") × 175 mm (6.9") × 30.2 mm (1.2") (without mounting brackets)	
Weight (with mounting plate)	1.08 kg (2.38 lbs)	
Cooling	Natural convection–no fans	
Enclosure	Class II double-insulated, corrosion-resistant polymeric enclosure	
IP Rating	Outdoor-IP67	
Maximum altitude	2,600 m	
Calorific value	37.5 MJ/unit	
COMPLIANCE	**IQ7PLUS-72-2-INT**	**IQ7A-72-2-INT**
Grid compliance	IEC 62109-1, IEC 62109-2/IS 16221; IEC 61727	
Safety	EN IEC 62109-1, EN IEC 62109-2	
Anti-Islanding	IEC 62116/IS 16169	
EMC	EN IEC 61000-3-2, 61000-3-3, 61000-6-2, 61000-6-3, EN IEC 50065-1, 50065-2-1	
Product labelling	CE & BIS	
Advanced grid functions[1]	power export limiting (PEL), phase imbalance management (PIM), loss of phase detection (LOP), power factor control Q (U), cos (phi) (P)	
Microinverter communication	Powerline communication (PLC) 110–120 kHz (Class B), Narrow band 200 Hz	

(1) Some of these functions require IQ Gateway Metered with current transformers and/or IQ Relay installed.









Assembled in China, India, and Mexico.

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