

IQ7 and IQ7+ Microinverters

with Integrated MC4 connectors

The high-powered, smart grid-ready **IQ7 and IQ7+ Microinverters** with Integrated MC4 connectors dramatically simplifies the installation process while achieving the highest system efficiency.

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

IQ Series Microinverters extend the reliability standards set forth by previous generations and undergo over a million hours of power-on testing, enabling Enphase to provide an industry-leading warranty of up to 25-years.



Easy to Install

- Lightweight and simple
- Faster installation with improved, lighter two-wire cabling
- Built-in rapid shutdown compliant (NEC 2014, 2017, & 2020)

Productive and Reliable

- Optimized for high-powered 60-cell/120-half-cell and 72-cell/144-half-cell PV modules.
- More than a million hours of testing
- Class II double-insulated enclosure
- UL listed

Smart Grid-Ready

- Complies with advanced grid support, voltage and frequency ride-through requirements
- Remotely updates to respond to changing grid requirements
- Configurable for varying grid profiles
- Meets CA Rule 21 (UL 1741-SA) and IEEE 1547:2018 (UL 1741-SB, 3rd Ed.)



IQ7 and IQ7+ Microinverters with Integrated MC4 Connectors

INPUT DATA (DC)	IQ7-60-M-US		IQ7PLUS-72-M-US	
Commonly used module pairings ¹	235W - 350W		235W - 440W	
Module compatibility	60-cell PV modules only		60-cell/120-half-cell and 72-cell/144-half-cell PV modules	
Maximum input DC voltage	48V		60V	
Peak power tracking voltage	27V - 37V		27V - 45V	
Operating range	16V - 48V		16V - 60V	
Min/Max start voltage	22V/48V		22V/60V	
Max. input DC short-circuit current	25A		25A	
Max. module Isc	20A		20A	
Overvoltage class DC port	II		II	
DC port backfeed current	0A		0A	
PV array configuration	1 x 1 ungrounded array; No additional DC side protection required; AC side protection requires max 20A per branch circuit			
OUTPUT DATA (AC)	IQ7 Microinverter		IQ7+ Microinverter	
Peak output power	250VA		295VA	
Maximum continuous output power	240VA		290VA	
Nominal (L-L) voltage/range ²	240V/ 211-264V	208V/ 183-229V	240V/ 211-264V	208V/ 183-229V
Maximum continuous output current	1.0A (240V)	1.15A (208V)	1.21A (240V)	1.39A (208V)
Nominal frequency	60 Hz		60 Hz	
Extended frequency range	47 - 68 Hz		47 - 68 Hz	
AC short circuit fault current over 3 cycles	5.8 Arms		5.8 Arms	
Maximum units per 20A (L-L) branch circuit ³	16 (240VAC)	13 (208VAC)	13 (240VAC)	11 (208VAC)
Overvoltage class AC port	III		III	
AC port backfeed current	18mA		18mA	
Power factor setting	1.0		1.0	
Power factor (adjustable)	0.85 leading ... 0.85 lagging		0.85 leading ... 0.85 lagging	
EFFICIENCY	@240V	@208V	@240V	@208V
Peak efficiency	97.6 %	97.6 %	97.5 %	97.3 %
CEC weighted efficiency	97.0 %	96.5 %	97.0 %	96.5 %
MECHANICAL DATA				
Ambient temperature range	-40°C to +65°C (-40°F to +149°F)		-40°C to +65°C (-40°F to +149°F)	
Relative humidity range	4% to 100% (condensing)			
DC Connector type	Staubli made MC4			
Dimensions (HxWxD)	212 mm x 175 mm x 30.2 mm (without bracket)			
Weight	1.1 kg (2.4 lbs)			
Cooling	Natural convection - No fans			
Approved for wet locations	Yes			
Pollution degree	PD3			
Enclosure	Class II double-insulated, corrosion resistant polymeric enclosure			
Environmental category/UV exposure rating	NEMA Type 6/outdoor			
Maximum Operating Altitude	2,600 m			
FEATURES				
Communication	Power Line Communication (PLC)			
Monitoring	Enphase Installer App and monitoring options. Compatible with IQ Gateway.			
Disconnecting means	The AC and DC connectors have been evaluated and approved by UL for use as the load-break disconnect means required by NEC 690 and C22.1-2018 Rule 64-220.			
Compliance	CA Rule 21 (UL 1741-SA), IEEE 1547:2018 (UL 1741-SB, 3 rd Ed.) HEI Rule 14H SRD 2.0 UL 62109-1, FCC Part 15 Class B, ICES-0003 Class B, CAN/CSA-C22.2 NO. 107.1-01 This product is UL Listed as PV Rapid Shut Down Equipment and conforms with NEC 2014, NEC 2017, and NEC 2020 section 690.12 and C22.1-2018 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors, when installed according manufacturer's instructions.			

1. Pairing PV modules with wattage above the limit may result in additional clipping losses. See the compatibility calculator at <https://link.enphase.com/module-compatibility>.

2. Nominal voltage range can be extended beyond nominal if required by the utility.

3. Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

NOTE: Adapters 1 and 2 are qualified per UL subject 9703. Adapter 3 requires installers to field install their choice of connector.

To learn more about Enphase offerings, visit enphase.com

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IQ7-Model-M-DS-0101-EN-US-12-23-2022

