

## Enphase IQ 7 and IQ 7+ Microinverters

The high-powered smart grid-ready **Enphase IQ 7 Micro™** and **Enphase IQ 7+ Micro™** dramatically simplify the installation process while achieving the highest system efficiency.

Part of the Enphase IQ System, the IQ 7 and IQ 7+ Microinverters integrate seamlessly with the Enphase IQ Envoy™, Enphase Q Aggregator™, Enphase IQ Battery™, and the Enphase Enlighten™ 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)

### Productive and Reliable

- Optimized for high-powered 60-cell and 72-cell™ 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
- Remote updates to respond to changing grid requirements
- Configurable for varying grid profiles
- Meets CA Rule 21 (UL 1741-SA)



To learn more about Enphase offerings, visit [enphase.com](http://enphase.com)



## Enphase IQ 7 and IQ 7+ Microinverters

INPUT DATA (DC)	IQ7 PLUS-72-2-US	IQ7 PLUS-72-2-US
Commonly used module ratings <sup>1</sup>	235 W - 350 W +	235 W - 600 W +
Module compatibility	60-cell PV modules only	60-cell and 72-cell PV modules
Maximum input DC voltage	48 V	60 V
Peak power tracking voltage	27 V - 37 V	27 V - 45 V
Operating range	16 V - 48 V	16 V - 60 V
Min Max start voltage	22 V / 43 V	22 V / 60 V
Max DC short circuit current (module Isc)	15 A	15 A
Over-voltage class DC port	II	II
DC port backfeed current	0 A	0 A
PV array configuration	1 x 1 ungrounded array. No additional DC side protection required. AC side protection requires max 20A per branch circuit	1 x 1 ungrounded array. No additional DC side protection required. AC side protection requires max 20A per branch circuit
OUTPUT DATA (AC)	IQ 7 Microinverter	IQ 7+ Microinverter
Peak output power	250 VA	295 VA
Maximum continuous output power	240 VA	290 VA
Nominal (L-L) voltage/range <sup>2</sup>	240 V / 208 V / 211-264 V	240 V / 208 V / 211-264 V
Maximum continuous output current	1.0 A, 1.15 A	1.21 A, 1.39 A
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 amps per 20 A (L-L) branch circuit <sup>3</sup>	15 (240 VAC) 13 (208 VAC)	13 (240 VAC) 11 (208 VAC)
Overvoltage class AC port	II	II
AC port backfeed current	0 A	0 A
Power factor (adjustable)	1.0	1.0
Power factor setting	0.7 leading... 0.7 lagging	0.7 leading... 0.7 lagging
EFFICIENCY	@240 V	@208 V
Peak CEC efficiency	97.6 %	97.5 %
CEC weighted efficiency	97.0 %	97.0 %
MECHANICAL DATA	IQ 7 Microinverter	
Ambient temperature range	-40°C to +65°C	
Relative humidity range	4% to 100% (condensing)	
Connector type	MCA (per Amphenol HD-UTX with additional Q-CCC-5 adapter)	
Dimensions (WxHxD)	212 mm x 175 mm x 36.2 mm (without bracket)	
Weight	1.68 kg (3.88 lb)	
Cooling	Natural convection - No fans	
Approved for wet locations	Yes	
Pollution degree	P03	
Enclosure	Class II double-insulated, corrosion resistant polymeric enclosure	
Environmental category / UV exposure rating	NEMA Type 6 / outdoor	
FEATURES	Power Line Communication (PLC) Enlighten Manager and MyEnlighten monitoring options. Both options require installation of an Enphase IQ Envoy. The AC and DC connectors have been evaluated and approved by UL for use as the load break disconnect required by NEC 690.	
Compliance	CA Rule 21 (UL 1741-SA) UL 62109-1, UL 1741, IEEE 1547, FCC Part 15 Class B, ICES-003 Class B, CAN/CSA-C22.2 NO. 1071-01 This product is UL Listed as PV Rated Smart Device Equipment and conforms with NEC 2014 and NEC 2017 sections 690.11 and C21.7-2015 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC connectors, when installed according to manufacturer's instructions.	

<sup>1</sup> No enforced DC/AC ratio. See the compatibility calculator at <http://enphase.com/compatibility>

<sup>2</sup> Nominal voltage range can be extended beyond nominal if required by the utility.

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

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## Major Equipment

Project: Harnois 6.75 kW Residential Roof-mount Solar System



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