

Enphase IQ 7 PD Microinverters for Full Site Upgrade

The high-powered smart grid-ready **Enphase IQ Series™** Microinverters dramatically simplify the installation process while achieving the highest system efficiency.

The IQ Series Microinverters integrate with the Enphase Q Cable™, Enphase IQ Envoy™, Enphase AC Battery™, and the Enphase Enlighten™ monitoring and analysis software to provide a solution for full site upgrade.

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 72-cell or 84-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
- Remotely updates to respond to changing grid requirements
- Configurable for varying grid profiles
- Meets CA Rule 21 (UL 1741-SA)

* See specifications on reverse.



Enphase IQ 7 PD Microinverters

INPUT DATA (DC)	IQ7PD-72-2-US		IQ7PD-84-2-US	
Commonly used module pairings ¹	230 W +		250 W +	
Module compatibility	60-cell & 72-cell PV module		72-cell & 84-cell PV modules	
Maximum input DC voltage	54 V		60 V	
Peak power tracking voltage	22 V - 40 V		31 V - 50 V	
Operating range	20 V - 54 V		20 V - 60 V	
Min/Max start voltage	22 V / 48 V		22 V / 60 V	
Max DC short circuit current (module I _{sc})	12 A		10 A	
Overvoltage class DC port	II		II	
DC port backfeed current	<0.55 mA		<0.55 mA	
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)	IQ7PD-72-2-US		IQ7PD-84-2-US	
Peak output power	199 VA		220 VA	
Maximum continuous output power	190 VA		210 VA	
Nominal (L-L) voltage/range ²	240 V / 211-264 V	208 V / 183-229 V	240 V / 211-264 V	208 V / 183-229 V
Maximum continuous output current	0.80 Arms (240 V)	0.92 Arms (208 V)	0.88 Arms (240 V)	1.06 Arms (208 V)
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 20 A (L-L) branch circuit ³	20 (240 VAC)	17 (208 VAC)	18 (240 VAC)	15 (208 VAC)
Overvoltage class AC port	III		III	
AC port backfeed current	0.08 A		0.08 A	
Power factor setting	0.95		0.95	
EFFICIENCY	@240 V	@208 V	@240 V	@208 V
Peak efficiency	97.4 %	97.1 %	97.4 %	97.1 %
CEC weighted efficiency	96.5 %	96.5 %	96.5 %	96.5 %
MECHANICAL DATA				
Ambient temperature range	-40°C to +65°C			
Relative humidity range	4% to 100% (condensing)			
Connector type	MC4 (or Amphenol H4 UTX with additional Q-DCC-5 adapter)			
Dimensions (WxHxD)	212 mm x 175 mm x 30.2 mm (without bracket)			
Weight	1.08 kg (2.38 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			
FEATURES				
Communication	Power Line Communication (PLC)			
Monitoring	Enlighten Manager and MyEnlighten monitoring options. Both options require installation of an Enphase IQ Envoy.			
Disconnecting means	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, UL1741/IEEE1547, 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 and NEC-2017 section 690.12 and C22.1-2015 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors, when installed according manufacturer's instructions.			

1. No enforced DC/AC ratio. See the compatibility calculator at <https://enphase.com/en-us/support/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.

To learn more about Enphase offerings, visit enphase.com

