IQ7XS Microinverter

The high-powered, smart grid-ready IQ7XS Microinverter dramatically simplifies the installation process while achieving the highest system efficiency for systems with 96-cell modules.

Part of the Enphase Energy System, the IQ7XS Microinverter integrates with the IQ Gateway, IQ Battery, and the Enphase Installer App monitoring and analysis software.

Enphase 25 year limited warranty

The 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.

Connect PV modules quickly and easily to IQ7XS Microinverters using the included Q-DCC-2 adapter cable with plug-and-play MC4 connectors.

UL CERTIFIED SAFETY

IQ7XS Microinverters are UL Listed as PV rapid shutdown equipment and conform with various regulations when installed according to manufacturer's instructions.

Easy to install

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

Efficient and reliable

- Optimized for high powered 96-cell modules
- Highest CEC efficiency of 97.5%
- 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.)

To learn more about Enphase offering, visit Enphase.com

IQ7XS Microinverters

INPUT DATA (DC)	UNITS	IQ7XS-96-2-US
Commonly used module pairings [1]	W	320–460
Module compatibility	–	To meet compatibility, PV modules must be within maximum input DC voltage and maximum module I_{sc} listed below. Module compatibility can be checked at https://enphase.com/installers/microinverters/calculator.
MPPT voltage range	V	53-64
Operating range	V	25–79.5
Minimum/Maximum start voltage	V	33/79.5
Maximum input DC voltage	V	79.5
Maximum continuous input DC current	A	6.5
Maximum module I_{sc}	A	10
Overvoltage class DC port	–	II
DC port backfeed current	mA	0
PV array configuration	–	1 × 1 ungrounded array; no additional DC side protection required; AC side protection requires maximum 20 A per branch circuit.

OUTPUT DATA (AC)	UNITS	IQ7XS-96-2-US@240 VAC	IQ7XS-96-2-US @208 VAC
Peak output power	VA	320	
Maximum continuous output power	VA	315	
Nominal grid voltage (L-L)	V	240, split-phase (L-L), 180°	208, single-phase (L-L), 120°
Minimum and Maximum grid voltage [2]	V	211–264	183-229
Maximum continuous output current	A	1.31	1.51
Nominal frequency	Hz	60	
Extended frequency range	Hz	49–68	
AC short circuit fault current over three cycles	Arms	5.8	
Maximum units per 20 A (L-L) branch circuit [3]	–	12	10
Overvoltage class AC port	–	III	
AC port backfeed current	mA	18	
Power factor setting	–	1.0	
Grid-tied power factor (adjustable)	–	0.85 leading ... 0.85 lagging	
CEC weighted efficiency	%	97.5	97.0

MECHANICAL DATA	UNITS	
Ambient temperature range	°C (°F)	-40 to 60 (-40 to 140)
Relative humidity range	%	4 to 100 (condensing)
DC connector type	–	MC4 (or Amphenol H4 UTX with additional Q-DCC-5 adapter)
Dimensions (H × W × D)	mm (in)	212 (8.3) × 175 (6.9) × 30.2 (1.2)
Weight	kg (lbs)	1.1 (2.4)
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

COMPLIANCE	
Compliance	CA Rule 21 (UL 1741-SA), IEEE® 1547:2018 (UL 1741-SB 3rd 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 shutdown equipment and conforms with NEC 2014, NEC 2017, and NEC 2020, section 690.12 and C22.1-2015. Rule 64-218 rapid shutdown of PV Systems for AC and DC conductors when installed according to manufacturer's instructions.

(1) Pairing PV modules with wattage above the limit may result in additional clipping losses.
(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.