

Enphase SPWR-A5 (IQ7HS) Microinverter

The high-powered smart grid-ready **Enphase SPWR-A5 Microinverter™** with integrated MC4 connectors dramatically simplify the installation process while achieving the highest system efficiency.

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.



Easy to Install

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

Efficient and Reliable

- Optimized for high powered 66-cell* modules
- Highest CEC efficiency of 97.0%
- 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)

* The IQ7HS is required to support 66-cell modules.



Enphase IQ7HS Microinverter

INPUT DATA (DC)		IQ7HS-66-M-US	
Commonly used module pairings ¹	320 W - 460 W +		
Module compatibility	66-cell PV modules		
Maximum input DC voltage	59 V		
Peak power tracking voltage	38 V - 43 V		
Operating range	20 V - 59 V		
Min/Max start voltage	30 V / 59 V		
Max DC short circuit current (module I _{sc})	15 A		
Overvoltage class DC port	II		
DC port backfeed current	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		
OUTPUT DATA (AC)		@240 VAC	@208 VAC
Peak output power	384 VA	369 VA	
Maximum continuous output power	384 VA	369 VA	
Nominal (L-L) voltage/range ²	240 V / 211-264 V	208 V / 183-229 V	
Maximum continuous output current	1.60 A (240V)	1.77 A (208V)	
Nominal frequency	60 Hz	60 Hz	
Extended frequency range	47 to 68 Hz	47 to 68 Hz	
AC short circuit fault current over 3 cycles	4.82 A	4.82 A	
Maximum units per 20 A (L-L) branch circuit ³	10	9	
Overvoltage class AC port	III	III	
AC port backfeed current	18 mA	18 mA	
Power factor setting	1.0	1.0	
Power factor (adjustable)	0.85 leading ...0.85 lagging	0.85 leading ...0.85 lagging	
EFFICIENCY		@240 V	@208 V
CEC weighted efficiency	97.0 %	96.5 %	
MECHANICAL DATA			
Ambient temperature range	-40°C to +60°C		
Relative humidity range	4% to 100% (condensing)		
Connector type	Staubli made MC4		
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, corrosion resistant polymeric enclosure		
Environmental category / UV exposure rating	NEMA type 6 / outdoor		
Altitude	2000m		
FEATURES			
Communication	Power Line Communication (PLC)		
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), HECO v1.1 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 to 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