

Enphase S280



Designed for high-powered, 60-cell modules, the advanced grid-ready Enphase **S280 Microinverter™** is built on the fifth-generation platform and achieves the highest efficiency for module-level power electronics along with cost per watt reduction. With its all-AC approach, the S280 simplifies design and installation for 280 VA installations, and delivers optimal energy harvest. The S280 is compatible with storage systems, including battery management systems.

The Enphase S280 integrates seamlessly with the Enphase Envoy-S™ communications gateway, and Enphase Enlighten™ monitoring and analysis software.

PRODUCTIVE

- Optimized for higher-power, 60-cell modules
- Maximizes energy production
- Minimizes impact of shading, dust, and debris

SIMPLE AND RELIABLE

- No GEC needed for microinverter
- No DC design or string calculation required
- More than 1 million hours of testing
- Industry-leading warranty, up to 25 years

ADVANCED GRID READY

- Complies with fixed power factor, voltage and frequency ride-through requirements
- Remote updating to respond to changing grid requirements
- Configurable for variable grid profiles like Hawaiian Electric Company (HECO) Rule 14H, California Rule 21

Enphase **S280** Microinverter // DATA

INPUT DATA (DC)		
Commonly used module pairings ¹		235 W - 365 W
Maximum input DC voltage		48 V
Peak power tracking voltage		27 V - 37 V
Operating range		16 V - 48 V
Min/Max start voltage		22 V / 48 V
Max DC short circuit current		15 A
OUTPUT DATA (AC)		208 VAC
Peak output power		280 VA
Maximum continuous power		270 VA
Nominal voltage/range ²		208 V / 183-229 V
Nominal output current		1.30 A
Nominal frequency/range		60 / 57 - 61 Hz
Extended frequency range		57 - 63 Hz
Power factor at rated power		1.0
Maximum units per 20 A branch circuit		21 (three phase, balanced)
Maximum output fault current		663 mA rms, 100 ms
Power factor (adjustable)		1 / 0.7 leading ... 0.7 lagging
EFFICIENCY		208 VAC
CEC weighted efficiency		96.5 %
Peak inverter efficiency		96.8 %
MECHANICAL DATA		
Ambient temperature range		-40°C to +65°C
Connector type		S280-60-LL-2-US: MC4 S280-60-LL-5-US: Amphenol H4
Dimensions (WxHxD)		172 mm x 175 mm x 35 mm (without bracket)
Weight		1.8 kg (4 lbs)
Cooling		Natural convection - No fans
Enclosure environmental rating		Outdoor - NEMA 6
FEATURES		
Compatibility		60-cell PV modules
Communication		Power line
Integrated ground		The DC circuit meets the requirements for ungrounded PV arrays in NEC 690.35. Equipment ground is provided in the Engage Cable. No additional GEC or ground is required. Ground fault protection (GFP) is integrated into the microinverter.
Monitoring		Enlighten Manager and MyEnlighten monitoring options
Compliance		UL1741/IEEE1547, FCC Part 15 Class B, CAN/CSA-C22.2 NO. 0-M91, 0.4-04, and 107.1-01



1. Suggestion only, inverter self limits DC inputs.
2. Nominal voltage range can be extended beyond nominal if required by the utility.

To learn more about Enphase Microinverter technology, visit enphase.com

