

## Enphase M250

The versatile **Enphase M250 Microinverter™** performs in both residential and commercial solar PV installations and is compatible with both 60-cell and 72-cell modules. With its all-AC approach and integrated grounding, the M250 delivers increased energy harvest and reduces design and installation complexity.

The Enphase M250 Microinverter integrates seamlessly with the Enphase Engage™ Cable, the Enphase Envoy™ communications gateway, and Enphase Enlighten™ monitoring and analysis software.

### Productive

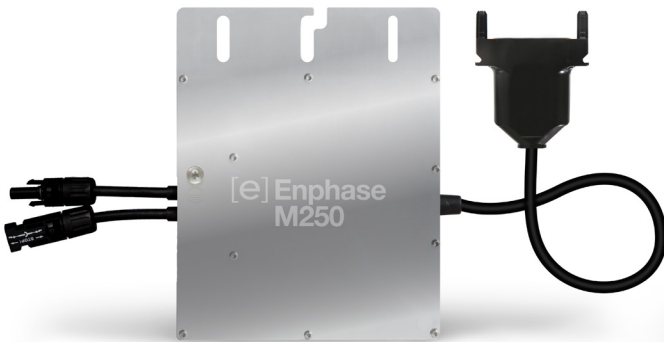
- Designed for a wide range of modules
- Maximizes energy production
- Minimizes impact of shading, dust, and debris

### Simple

- No DC design or string calculation required
- No GEC needed for microinverter
- Easy installation with Engage cable

### Reliable

- 4th-generation product
- More than 1 million hours of testing and millions of units shipped
- Industry-leading warranty, up to 25 years



# Enphase M250 Microinverter

| <b>INPUT DATA (DC)</b>                               | <b>MODELS:<br/>M250-60-2LL-S22,<br/>M250-60-2LL-S25</b>  | <b>MODELS:<br/>M250-72-2LL-S22,<br/>M250-72-2LL-S25</b> |
|--|--|---|
| Commonly used module pairings <sup>1</sup>           | 210 - 350+ W   | 210 - 350+ W  |
| Compatibility  | 60-cell PV modules   | 60-cell and 72-cell PV modules                          |
| Maximum input DC voltage                             | 48 V   | 62 V  |
| Peak power tracking voltage                          | 27 V - 39 V  | 27 V - 48 V   |
| Operating range                                      | 16 V - 48 V  | 16 V - 60V  |
| Min/Max start voltage                                | 22 V / 48 V  | 22 V / 48 V   |
| Max DC short circuit current                         | 15 A   | 15 A  |
| <b>OUTPUT DATA (AC)</b>                              |  |   |
| Peak output power                                    | 250 W  |   |
| Maximum continuous output power                      | 240 W  |   |
| Nominal output current                               | 1.15 A @ 208 VAC<br>1.0 A @ 240 VAC  |   |
| Nominal voltage/range                                | 208 V / 183-229 V @ 208 VAC<br>240 V / 211-264 V @ 240 VAC   |   |
| Nominal frequency/range                              | 60.0 / 57-61 Hz  |   |
| Extended frequency range <sup>2</sup>                | 57-62.5 Hz   |   |
| Power factor   | >0.95  |   |
| Maximum units per 20 A branch circuit                | 24 (three-phase 208 VAC)<br>16 (single phase 240 VAC)  |   |
| Maximum output fault current                         | 850 mA rms for 6 cycles  |   |
| <b>EFFICIENCY</b>                                    |  |   |
| CEC weighted efficiency                              | 96.5%  |   |
| Peak inverter efficiency                             | 96.5%  |   |
| Static MPPT efficiency (weighted, reference EN50530) | 99.4%  |   |
| Night time power consumption                         | 65 mW max  |   |
| <b>MECHANICAL DATA</b>                               |  |   |
| Ambient temperature range                            | -40°C to +65°C   |   |
| Dimensions (WxHxD)                                   | 171 mm x 173 mm x 30 mm (without mounting bracket)   |   |
| Weight   | 1.6 kg (3.4 lbs)   |   |
| Cooling  | Natural convection - No fans   |   |
| Enclosure environmental rating                       | Outdoor - NEMA 6   |   |
| Connector type                                       | MC4: M250-60-2LL-S22 and M250-72-2LL-S22<br>Amphenol H4: M250-60-2LL-S25 and M250-72-2LL-S25   |   |
| <b>FEATURES</b>                                      |  |   |
| 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   |   |
| Transformer design                                   | High frequency transformers, galvanically isolated   |   |
| Compliance   | UL 2703 recognized, UL1741/IEEE1547, FCC Part 15 Class B, CAN/CSA-C22.2 NO. 0-M91, 0.4-04, and 107.1-01<br><br>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 [enphase.com/en-us/support/module-compatibility](http://enphase.com/en-us/support/module-compatibility).

2. Frequency ranges can be extended beyond nominal if required by the utility.

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