

Enphase Microinverter Family: Similarities and Differences

Enphase is pleased to offer the **new M250 Microinverter based upon our fourth-generation platform.**

What's changed

The new 4th generation features:

- **Higher EU efficiency:** 95.7%
- **Higher power:** Product family now includes new model with 258W peak output power optimised for pairing with more powerful modules.
- **New look:** Flat lid

What's the same

- **Product quality:** rigorous design, manufacturing, and test standards deliver industry-leading reliability and extremely low failure rates
- **Fast, simple installation:** plug-and-play Engage Cable system enables rapid, flexible installs. The same accessories work for both the M215 and M250
- **Durability:** rugged, IP67 rated enclosure



FEATURE	M215	M250
Lid type	Grooved	Flat
Recommended input power (STC)	190 – 270W	210 – 310W
EU efficiency (230VAC)	95.4%	95.7%
Peak output power	225 W	258 W
Maximum units per 20A branch circuit (230 VAC / 400 VAC)	17 / 27	14 / 24
Part number	M215-60-230-S22	M250-60-230-S22
Unit label text	215 Watt Utility-Interactive Inverter	M250 Utility-Interactive Inverter

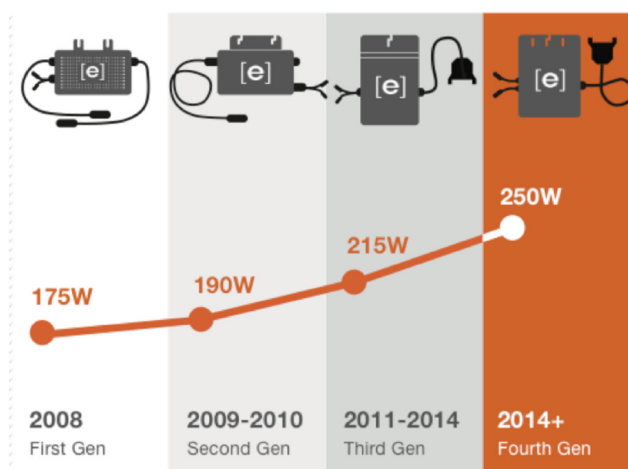
M250 vs. M215: Module Pairing Considerations

There are instances where either the M250 or the M215 is an appropriate choice for pairing with a given module. For higher power 60-cell modules, the M250 is the logical choice. For lower rated modules, select the M215. However, for modules with STC output ratings between 250W and 270W, there are **several factors to weigh up when deciding which microinverter to select for the installation.**

MODULE POWER RANGE	Below 250W	Between 250W and 270W	Above 270W
MICROINVERTER SELECTION	M215	System specific considerations	M250
Factors to consider when pairing with 250W – 270W modules	<p>Local conditions: Differences in temperature and irradiation impact module maximum power output. High light levels in cooler climates along the coast or at higher altitudes result in higher module output and drive selection of the M250 to take advantage of these gains.</p> <p>Site specifics: Arrays with less than optimal tilt and azimuths may not be able to utilise the full capacity of M250 making these systems a better pairing for M215.</p> <p>Module quality and performance: Not all modules are created equal. Even modules from different brands with the same nameplate rating can often vary widely in peak DC output, given variance in manufacturing and quality assurance testing standards. Modules of lower quality may not benefit from the higher output of the M250.</p> <p>Project and portfolio economics: Dependent on the module brand and the install location, the M215 may reach saturation when paired with a module with an output rating above 250W and the M250 should be considered. A project's financial performance determines optimal sizing, projects with lower price per kWh or higher fixed costs may be better supported with the M215.</p>		

Enphase's family of fourth-generation microinverters **continues the tradition of power, efficiency, and reliability advancements.**

Built on top of the already reliable third-generation platform, the fourth-generation products underwent an unprecedented, industry-leading one million hours of pre-launch product testing. Featuring a reduced parts count, the M250 delivers a new standard in microinverter reliability.



Enphase's fourth-generation microinverter offers industry-leading reliability.