

Why Enphase Systems have no moving parts

Auto makers and phone makers have improved reliability by taking moving parts out of their products. So has Enphase. Our Microinverters are more reliable because they don't require a cooling fan.

As a result, Enphase Systems come with the highest environmental durability rating and no need for routine maintenance.



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Problem with moving parts

Moving parts make products more likely to break down in time. Look at the auto industry.¹ The internal combustion engine, over 100 years old, is still plagued with problems affecting cars with low reliability ratings.

String inverters have moving parts

String inverters use cooling fans to control internal temperature. This requires ventilation, exposing electronics to moisture, dust, and debris. It also requires costly service to clear air filters and replace broken fans.

Advantages of Enphase technology

When Enphase brought the first Microinverter System to market, we made the cooling fan obsolete. Our system has built-in temperature control. Superior reliability allows us to provide a 25-year warranty, matching solar panel warranties and surpassing many string inverter warranties.

The value of a sealed enclosure

The Enphase Microinverter enclosure achieves the highest environmental durability rating, sealing out moisture, dust, and debris. Thus, Enphase Systems have no need for routine, on-site maintenance.

25-year Enphase warranty

Most string inverters fail during system lifetime. The owner pays for replacement. The owner also loses value while the system is down and awaiting service. A 25-year warranty eliminates these headaches.

¹ 2017 Consumer Reports Car Reliability Survey