

FAQs for Maxeon 5 AC Modules

SALES	Does the Maxeon 5 AC PV system improve inventory and logistics concerns?	This solution allows installers to purchase AC panels instead of separately purchasing panels + inverter + optimizers. From an inventory perspective this results in fewer SKUs to manage. There is no need to purchase inverters of different powers to accommodate different system sizes. Logistics are simplified and installers will be able to adapt to unforeseen situations they will find on the roof.
	Is a Maxeon 5 AC system as reliable as a DC Maxeon panel?	The Enphase microinverter is highly reliable. Data indicates only a 0.05% failure rate. (roughly 1 out of 2000 microinverters sold). The microinverter is factory integrated and the reliability of microinverter attach and connection is much higher than in the field.
	How is a Maxeon 5 AC PV system different from DC optimizers?	This is an all AC solution. It's much safer (no DC on the roof or in the building) and faster to install (even compared to installing microinverter and DC panel).
	Is it possible to expand a Maxeon 5 AC PV system?	You can add as many panels you like, wherever you like in terms of position on the roof and on the electrical panel sequence. They are connected in parallel, not in series.
	Is this a SunPower by Maxeon Solar Technologies product or an Enphase product?	This is a joint development product. Maxeon Solar Technologies and Enphase worked together to create a high-end solution for residential PV applications. IQ7A was initially designed specifically for Maxeon 5 66cell panel.
	Is it possible to troubleshoot an AC panel remotely?	Yes. If the system is connected to the Enlighten monitoring platform you can run a diagnosis remotely with or without Enphase support team. Should an onsite visit be necessary, please make sure to open a ticket with Enphase support team.
	I understand the electricity grid operators are starting to demand the ability to limit energy export when the grid is overloaded. Is my Max5 AC system ready for this requirement?	The Enphase Envoy will be able to provide export limiting at the point of connection to suit the grid operators' limit. In addition, the IQ7A is compliant with the latest AS 4777.2 2015 standard which means its compatible with Demand Response Modes from grid operators.
	Is the Maxeon 5 AC module more reliable than pairing modules with a string inverter or DC optimiser?	<p>Yes, it is. Here is why:</p> <ol style="list-style-type: none"> 1. There is an increased level of system redundancy as each Maxeon 5 module is independent of other modules in the array. If one module fails, the others continue to operate normally. 2. The DC voltage levels for the IQ7A is at ELV (extra low voltage) and as such there are increased levels of component reliability due to lower operating DC voltages, and therefore fewer stresses on components. 3. One of the biggest failure modes on rooftop applications is the DC isolator. Maxeon 5 systems do not require DC isolators. They use AC isolators which are safer and more established. 4. In addition, due to the very short amount of DC cable on the roof, there is much less chance of DC earth faults. DC connectors are tucked underneath the module which further increases the reliability of connection from external elements. <p>Both DC optimisers and string inverter systems are exposed to all of these failure risks.</p> <p>This reliability claim is also proven through both components reporting industry-leading return rates: 0.05% for Maxeon modules and 0.07% for Enphase MIs.</p>

WARRANTY	What's the warranty of a Maxeon 5 AC PV module?	There is a 25-year product warranty on the microinverter provided by Enphase and a 25-year product, performance and service warranty on the panel provided by Maxeon Solar Technologies. The Envoy warranty is separate for five years.
	What is the warranty on the microinverter?	In addition to the 25-year product, power and service warranty on the Maxeon 5 solar module provided directly by Maxeon, Enphase is providing a 25-year product warranty on the microinverter. The service aspect to the microinverter warranty is supported by a 10-year labour reimbursement. The labour reimbursement is provided directly from Enphase and details can be found at https://enphase.com/en-au/support/labor-reimbursement-warranty-service
	I see the labour warranty for the MI is for 10 years. What is the cost to replace the microinverter if it fails after year 10?	You will claim the Product warranty on the microinverter. Once the claim is validated a replacement MI will be shipped to the installer or homeowner location. The installer may need to charge their homeowners for the replacement service.
	If there is need for a replacement, who will provide the service?	Tier 1 support will be provided through the Enphase support team. If the issue concern: <ul style="list-style-type: none"> the microinverter: Enphase will support the case according to its warranty the DC panel: Maxeon Solar Technologies will support the case according to its warranty.
	Will there be a field replacement, or we need to replace the whole panel?	You can replace the microinverter keeping the same PV panel if there is no need to replace both. Microinverter can be easily swapped with a new one on the roof.

INSTALLATION & TECHNICAL

INSTALLATION	Can I use a Maxeon 5 AC to expand a conventional string inverter solution?	Yes, this is possible. You will need to install an additional AC line and circuit breaker.
	How are the microinverters connected to the internet?	The microinverters communicates to the Enphase Gateway called ENVOY via Power Line Communication (PLC) and the ENVOY is connected to Internet in using Wi-Fi infrastructure per default. You can connect a LAN cable (not provided) if you prefer. It is also possible to pair the ENVOY gateway to a cellular connection solution (not provided, yet available through Enphase distribution channels).
	Is an Envoy gateway always needed?	Yes, the ENVOY gateway is required for system commissioning and to facilitate microinverter software upgrades. For this reason, the ENVOY installation is required to support the microinverter product warranty.
	Is there a minimum number of Maxeon 5 AC that I need to install?	No. You can install 1 Maxeon 5 AC and it works.
	What happens in three phase systems?	It is possible to install a three-phase system using additional Enphase accessories.
	How can I manage a shaded or multiple azimuth roof with a Maxeon 5 AC PV system?	You can put 1 single panel wherever you like. It will work independently from the rest of the system.
	Is a Maxeon 5 AC PV system safer than conventional DC?	There is no DC on the roof or the building when installing Max 5 AC. No arc fault risks. Much quicker to turn off even compared to DC Optimizers solutions (it usually takes up to 180 seconds to reach "safe DC").
	Is it possible to expand a Maxeon 5 AC PV system?	You can add as many panels you like wherever you like in terms of position on the roof and on the electrical panel sequence (they are connected in parallel, not in series).

	What happens on single phase houses with a network limit of 5 or 10kw with batteries?	The export limits set by the utilities are there to ensure system stability of the network. With increased renewables penetration on our networks, AEMO are likely to require future functionality that allows remote curtailment to maintain stability of the network. Home battery storage uptake is forecast to increase, and with that PV system sizes are expected to grow. All this at a time when PV export limits reduce. Max 5 AC is configurable to meet export limitations with and without batteries installed on site.
	Will the Enphase balance of system items required be supplied by SunPower?	SunPower will supply the AC module and the remaining components (BOS) can be obtained from an Enphase distributor. Your SunPower RSM can point you in the right direction if you don't already have a contact for an Enphase distributor.
BATTERIES	Do these panels work with batteries other than Enphase?	Yes, any AC coupled battery solution will work. However, the Enlighten manager cannot perform 3rd party battery monitoring. Please use 3rd party battery manufacturers performance monitoring platform.
	Are there any restrictions on the types/brands of batteries that can be added?	The minimum requirement for 3rd party battery integration used with Max 5 system must be AC coupled. Please check with your chosen battery manufacturer on the specifications for maximum PV array size.
MONITORING	What additional items are needed in terms of monitoring and interconnecting cables to commission system?	Please refer to the documentation library from Enphase: https://enphase.com/en-au/support/solar-professionals/downloads Use Enphase installer toolkit which is a wireless commissioning app. For internet connected systems, the Envoy can be connected by Wifi and LAN.
	Where would the monitoring equipment be installed?	Typically, the Envoy is installed close to the MSB. A wifi or LAN connection needs to be available with internet connectivity. Communications between the Micro Inverters and Envoy is via comms over power. Please refer to the documentation library from Enphase: https://enphase.com/en-au/support/solar-professionals/downloads
	Is the monitoring real-time or delayed?	The Envoy captures 5 min data from the individual Micro inverters. The Envoy then reports to the Enlighten manager every 15 mins.

For more information on BOS requirements, battery compatibility, monitoring, installation and design questions, [check out our YouTube playlist for ACPV technical training.](#)