

AURORA



MAGNETEK
UNCOMMON POWER

AURORA[®] Photovoltaic Inverters





MAGNETEK
UNCOMMON POWER

AUR



Magnetek A Worldwide Leader

- Over 25 years of experience in power electronics
- 1500 Associates worldwide
- 8 plants in three continents, all ISO-9001 certified
- 50,000 m² of manufacturing floor
- Over 200 engineers in R&D

From Magnetek, a global leader in power electronics

Magnetek has more than 25 years of experience in professional and technologically advanced markets. We provide power electronic solutions for telecom, computer and industrial applications where reliability, compactness, efficiency and performance are key to the success of our customers. With sales exceeding \$250M Magnetek ranks among the largest public companies in power electronics and is quoted on the NYSE stock market.

Magnetek has eight ISO-9001 certified plants in three continents, with 1500 associates worldwide of which more than 200 work in R&D. With 50,000 m² of manufacturing floor and 12 fully automated SMT lines, our manufacturing capacity is able to serve our customers where and when is needed.

Magnetek has worked in Alternative Energy markets for several years with applications for wind power systems, fuel cell systems, microturbine systems and now with Aurora photovoltaic inverters.

Wind power systems



Fuel cell systems



Microturbine systems



A new market reference

Aurora, the new line of grid-tied photovoltaic inverters by Magnetek, includes isolated and transformerless models designed for outdoor and indoor applications.

All models share the same advanced technology solutions to give you the best performance and reliability. The indoor models have an innovative elegant design and include a built-in data logger with graphic display. Lightweight and compact, Aurora inverters are user friendly and easy to operate.

The outdoor models are robust and protected against the harshest weather conditions.

Europe

Indoor Transformerless



PVI-3600
3600 W

PVI-2000
2000 W

Outdoor Transformerless



PVI-3600-OUTD
3600 W

PVI-2000-OUTD
2000 W

VDE

USA and Europe

Outdoor Isolated



PVI-3000-I-OUTD
3000 W

PVI-2000-I-OUTD
2000 W

UL
VDE



Aurora® benefits

Designed for highest reliability

Your photovoltaic plant is designed to run for many years under the most variable conditions and you deserve to get the most out of it. At Magnetek we know this simple fact and have designed Aurora with uncompromised robustness.

Excellent reliability starts with excellent design, and careful evaluation of key characteristics such as:

- Optimal usage of Electrolytic Capacitors
- Top quality redundant fans with speed control
- Extended protections against voltage surges
- Extended protections of IGBTs
- Robust IP21 (Nema 2) and IP65 (Nema 4X) enclosures

The achievement of excellent reliability continues with excellence of manufacturing with ISO-9001, highly automated manufacturing and testing processes.

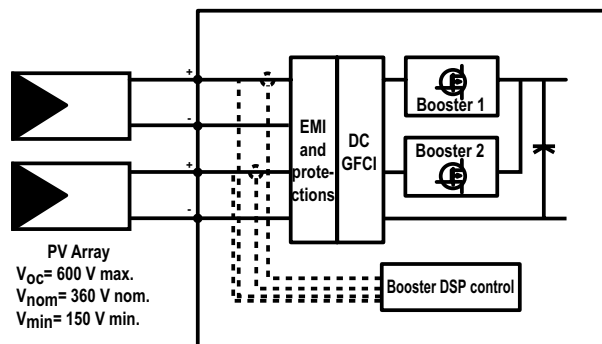
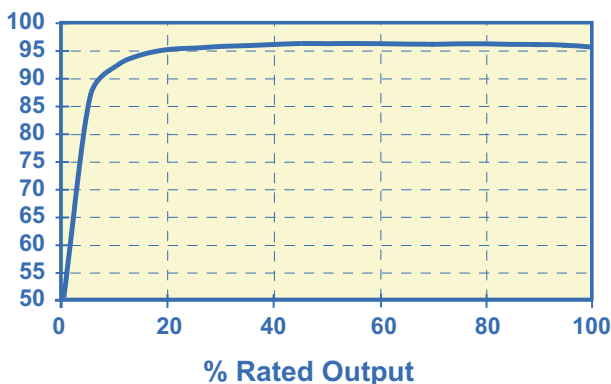


Optimal efficiency and energy harvesting

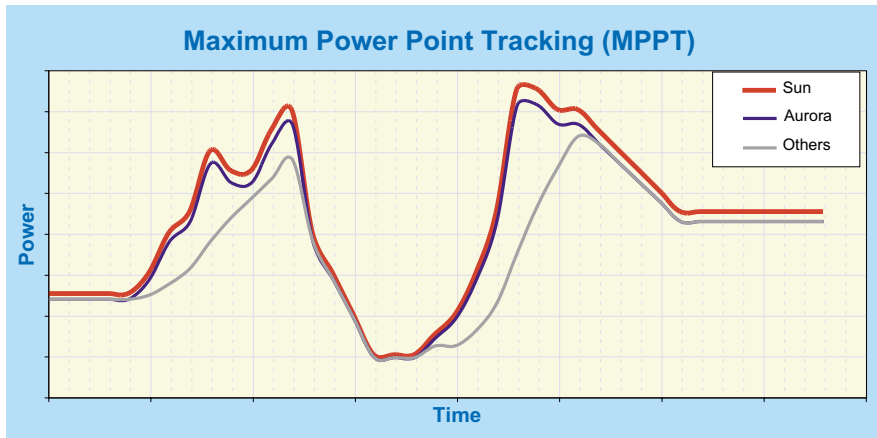
Aurora is at the top of the market for efficiency and energy harvesting. Indoor models have up to 96% efficiency and transformer isolated models have up to 94%.

The higher power models allow two PV arrays to be connected to two independent Maximum Power Point Tracking (MPPT) circuits so that you have more flexibility in designing your PV plant.

Typical Efficiency [%]



The MPPT control algorithms are particularly fast so that quick variations of irradiance can be carefully tracked allowing to harvest more energy than other inverters.



Compact and lightweight, yet robust and elegant

The indoor models are thin and weigh less than 8 kg. With IP21 (Nema 2) enclosure protection and conformal coating on the boards they are also suitable for installation in basements and under the roof.



Indoor Transformerless



Outdoor Transformerless

Easy to install and use

Aurora is powerful but easy to install and use. One person alone can easily handle the transformerless models.

The indoor models are particularly flexible: you can use industry standard plug-in connectors or use cable glands and cage clamp terminal blocks. You can even use preformed rear openings to pass cables from the wall for a very neat installation without cables in sight.

Once the inverter is properly connected, turn it on is a fully automatic and quick process.





The indoor models sponsor an embedded data logger with graphical LCD and keypad for viewing performance and operational data.

The outdoor models have a convenient 2 lines LCD that shows relevant operational data.



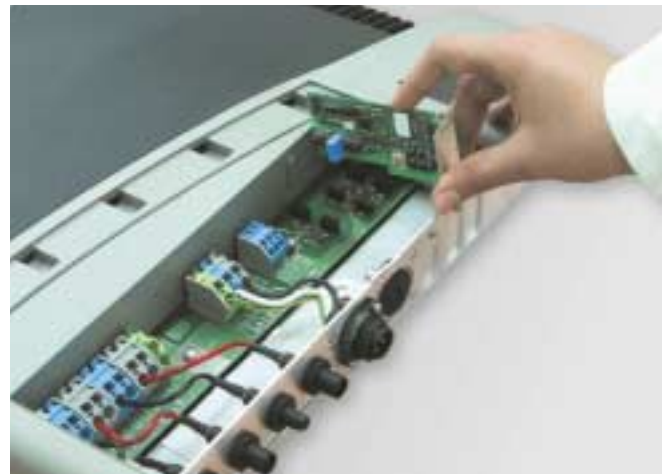
Flexible and easy communications and remote control

Aurora can communicate data in a variety of ways.

All indoor models have integrated RS232 and RS485 serial links. In addition to those, optional communications cards can be inserted in the expansion slots to provide communication with Power Line Modem (PLM), Ethernet, Dial-up Modem, or GSM modem.

All outdoor models have integrated PLM and RS485 links.

The PLM communication uses special algorithms developed by Magnetek that ensure flawless communications over disturbed AC lines where other inverters usually won't be able to communicate.



In the near future Aurora Easy Control will provide a dedicated, flexible control system with the ability to interface to sensors, panels, and other devices, in addition to providing large data storage of relevant parameters.

The powerful and user friendly Aurora Communicator program allows monitoring of single as well as multiple inverter installations with graphs and statistics that allow you to have the situation under full control at any time.



The Aurora product line includes also accessories such as PLM and RS485 interface boxes for Personal Computer, and customized breaker panels.



Realize the full potential of your photovoltaic plant with Magnetek's Aurora PV inverters



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