

AURIGA HP



AURIGA HP UPS combines reliability, innovation, and performance with reduced OPEX.

The only liquid cooled UPS on the market!

This 5th generation UPS guarantees the **lowest OPEX**, thanks also to solar integration and EnerClever functionality.

Designed for durability, AURIGA HP ensures top-level performance at optimal costs in every demanding environments.

100% made in Italy

The **AURIGA HP** series by Powertronix represents the **market peak in performance and reduced running costs**, with a strong emphasis on **environmental sustainability**. These products are meticulously designed for demanding, mission-critical environments, consistently proving their efficiency and stability. The AURIGA HP family has continually met the needs of critical sectors, delivering durable and reliable performance. Powertronix's AURIGA HP enables **unprecedented savings** on the overall running costs of your **emergency power supply system** by remotizing UPS's heat dissipation.

TYPICAL APPLICATION:

- Offices & IT;
- Telecommunications;
- Servers/ Datacenter;
- Medical/ Hospitals;
- Broadcasting;
- Access & Presence

SPECIAL APPLICATION:

- Hybrid UPS
- Energy Manager
- EN 50171

VFI-SS-111

3-3

120kVA-200kVA

AURIGA HP

UPS MODEL	AURIGA120	AURIGA160	AURIGA200
UPS NOMINAL RATING	120 kVA	160 kVA	200 kVA
UPS ACTIVE POWER	108kW	144 kW	180 kW
UPS PART NUMBER	AU120-000	AU160-000	AU200-000

FRONT VIEW



General:

UPS TOPOLOGY	VFI On-Line double conversion, with pure sine-wave output
CONVERTER/INVERTER	PFC and INVERTER IGBT based, high frequency, TRAFOLESS
STATIC SWITCH	Electronic + Contactors
COOLING SYSTEM	LIQUID COOLED(W/optional remotizable radiators) + AIR COOLED with adaptive fan speed

Input:

INPUT NOMINAL VOLTAGE	3P+N 380/400/415VAC
INPUT VOLTAGE TOLERANCE	304÷498VAC 100% load - Factory setting $\pm 20\%$ nominal voltage
INPUT NOMINAL FREQUENCY	50/60Hz
INPUT FREQUENCY TOLERANCE	40 ÷ 70 Hz
INPUT POWER FACTOR	0.99
MAX ABSORBED CURRENT	3PH+N @ 400V 195A 260A 325A
INPUT THDI	<3%

Output:

OUTPUT NOMINAL VOLTAGE	3P+N 380/400/415VAC
OUTPUT POWER FACTOR	0.9
OUTPUT THDV	< 2% with linear load & < 4% with non linear load
OVERLOAD	125% for 10 minutes - 150% for 60 seconds
OUTPUT NOMINAL FREQUENCY	50/60Hz $\pm 0.1\%$ stability
SOFT START	Available , 30 Seconds (factory selectable)

Bypass:

BYPASS NOMINAL V&F*	3P+N 380/400/415VAC or 1P+N 220/230/240VAC* - 50/60Hz
BYPASS VOLTAGE TOLERANCE	$\pm 20\%$ - Factory setting $\pm 10\%$
BYPASS ACCEPTED OVERLOAD	150% 30 min - 1000% 100ms
MANUAL BYPASS	Available, with mechanical security

Battery:

BATTERY CONFIGURATION	720VDC x string / EXTERNAL ONLY
BATTERY CHARGING I&V*	Factory setting 0.1C / 13,5VDC/block up to: 35A 45A 56A
BATTERY COMPATIBILITY	VRLA-AGM / VRLA-GEL / NiCd / Lithium / Others
BATTERY MANAGEMENT	Auto Test/ Equalization / Smart-battery management Autonomy display in minutes/seconds or percentage Optional: temperature compensation w/ external sensor

Environment:

DIMENSION	800x830x1800(h)mm - metal case - IP20 - complete with castors
WEIGHT (W/O Battery)	480Kg 540Kg 590Kg
TEMPERATURE & RH%	0÷40°C – RH% up to 95% non-condensing - 1.000m asl 1% derating every +100Mt up to 2000 asl
EXT INTERFACE	Standard: RS-232/RS485 + dry contacts +LED Status Display Optional: MODBUS / SNMP via external card; LCD Touch Display ; Remote panel

- A FRONT ACCESS DOOR*
- B FRONT LCD PANEL*
- C EPO BUTTON*
- 1 CABLE ENTRY
- 2 BATTERY CONNECTION
- 3 INPUT SWITCH
- 4 INPUT RESERVE SWITCH
- 5 MANUAL BYPASS
- 6 OUTPUT SWITCH
- 7 MAINTENANCE AND CONTROL ACCESS PANEL
- 8 RS-232/ RS485**
- 9 SMART SLOT**

* Accessible from the front

** Accessible from the Back

Others:

EUROPEAN DIRECTIVES	LV 2014/35/EU Low Voltage Directive EMC 2014/30/EU Electromagnetic Compatibility Directive / CE marks
STANDARDS	Safety IEC EN 62040-1; IEC EN 62040-2 EMC; RoHS Compliance; IEC EN 62040-3 (Voltage and Frequency Independent) VFI-SS-111

AURIGA HP

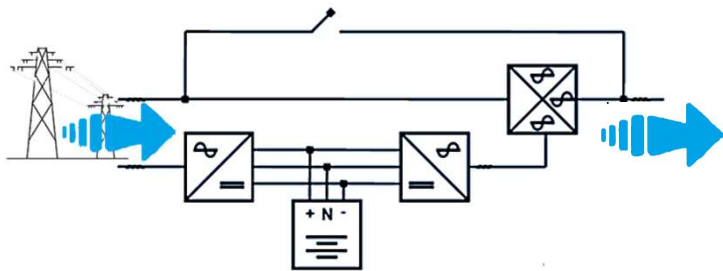
Working Mode:



+ UPS

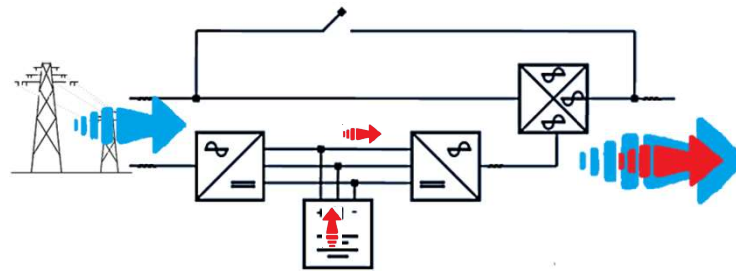
AURIGA HP operates as a standard UPS in Online Double Conversion or ECO mode. In **Online Double Conversion**, the UPS constantly converts AC to DC and back to AC, providing your load with **clean, stable power, free from spikes and fluctuations**—ideal for critical applications.

In **ECO mode**, the UPS powers the load directly from the mains when input power is stable, switching to battery only if an issue is detected.



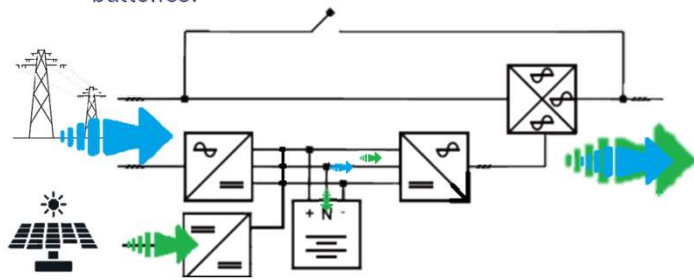
+ PEAK SHAVING

In addition to the standard mode, the AURIGA HP will use the batteries as an **“energy boost”**, meeting the **instantaneous energy demand** by drawing it from the battery instead of from the grid. This also allows the system to **output more energy than is being drawn from the grid**, thanks to the intrinsic intelligence in the control logic, special design considerations, and advanced firmware functionalities.



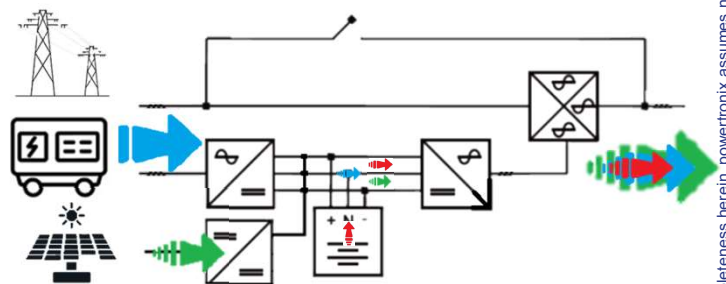
+ HYBRID UPS

In addition to the standard mode, the AURIGA HP can be **directly connected to PV panels** via Powertronix's SBC to **maximize energy efficiency**. Solar energy **will integrate with and reduce the grid power demand** based on the availability of PV energy. If properly sized, the system can potentially eliminate grid power consumption altogether, ensuring **maximum power supply efficiency and load protection**. Extra PV energy may also be used to charge the batteries.



+ ENERCLEVER UPS –AU/HP

Energclever functionality for AURIGA HP. The system will act as a **“SYSTEM ENERGY MANAGER,”** always giving the opportunity to switch seamlessly and use, among the available sources, the **most convenient energy**, while maintaining solid **continuity, stability and quality power provision** demands. It is also possible to combine EC UPS with Powertronix's specifically designed **Li-Ion based battery energy storage (BESS)**



POWERTRONIX

Secure Power

Innovation That Saves

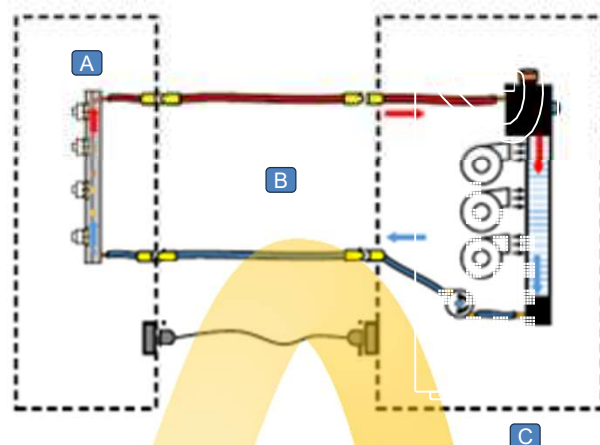
AURIGA HP

+ H₂O COOLING BENEFITS

The **Auriga HP liquid cooling system** captures the heat generated by the double conversion process and allows it to be dissipated remotely, either in a separate room or outdoors. With the **optional OSDE1154 kit**, heat dissipation can be relocated up to **30 meters away** from the UPS installation site, **significantly reducing installation costs and cutting down energy consumption needed to maintain optimal temperatures in the UPS room**. This results in **substantial operational savings, maximizing the efficiency and cost-effectiveness of the system**



AVERAGE SAVING ON A/C
of approx **250Mln BTU/y**



- A UPS's COLD PLATE**
- B CONTROL CABLES AND LIQUID PIPES**
- C EXTERNAL/ REMOTIZED HEAT-EXCHANGER**

+ SNMP/TCP-IP

+ RELAY CARD

+ HMI

The AURIGA HP series offers the possibility to integrate the UPS into your **Local Area Network**, enabling remote monitoring and control of the UPS status. The **OX-MGTBX506/4 SNMP** card provides full control over thresholds, allowing **alarms to be triggered and notifications to be sent via email** to the entire team or selected personnel.

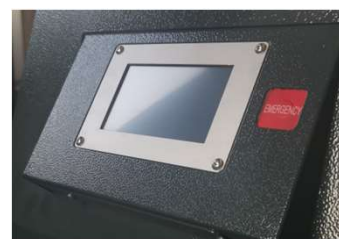
The freeware ViewPowerPro gives customers free access to a simple yet comprehensive monitoring tool

The AURIGA HP series **comes standard with CS0191** cards. Powertronix's exclusive CS0191 card design **ensures full integration** of the AURIGA series into your **Building Management System (BMS)** via RS232-RS485 com-protocols.

It supports five simultaneous active connections:

- Potential-free contacts (NO/NC)
- RS232 port with DB9 connector
- RS485 Modbus RTU
- rEPO (Remote Emergency Power Off)
- External Bypass AUX contact

The Auriga HP series can be equipped as optional with a modern, functional, and user-friendly **5" LCD touch screen display (OSDE1342)**. Additionally, with the **OSDE1024 remote panel**, control and monitoring of the UPS status can be **extended up to 100 meters**.



+ AURIGA HP ADDITIONAL OPTIONS

OSDE1232	Auriga 120+200 parallel kit (up to 8 units)
OSDE1236	Auriga 120 built in backfeed protection
OSDE1237	Auriga 160 built in backfeed protection
OSDE1238	Auriga 200 built in backfeed protection
OSDE1154	Auriga 120+200 remote heat-exchanger

OSDE1342	LCD Touch-screen Display for Auriga HP Family
OSDE0122	Auriga 120 2nd independent output AS+EO (emergency only)
OSDE0129	Auriga 160 2nd independent output AS+EO (emergency only)
OSDE0130	Auriga 200 2nd independent output AS+EO (emergency only)