POWERTRONIX
Uninterruptible Power Supply

Auriga HP

UPS 120 ÷ 200 kVA

PURE RELIABILITY

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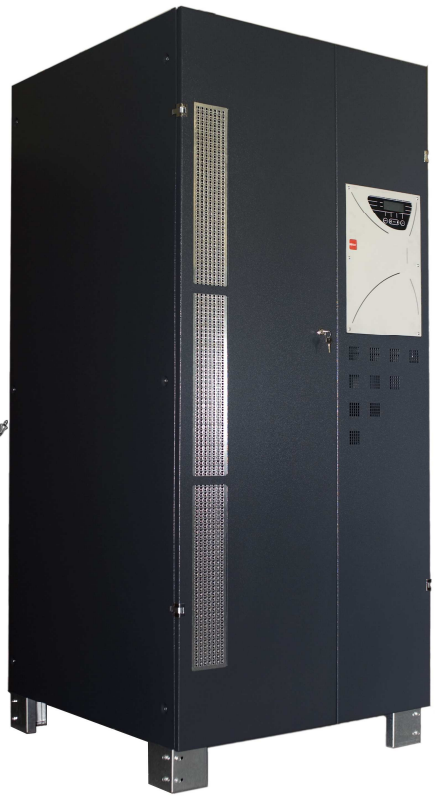

POWERTRONIX **AURIGA HP UPS** is complete and cost effective power protection solution delivering premium VFI online double conversion for IT and electrical infrastructures in corporate, medical, banking and industrial applications.

100% MADE IN ITALY, **AURIGA HP UPS** adopt PFC IGBT-based topology resulting in the highest levels of efficiency (0.99 input power factor - THDi <2%) and reliability for all mission critical loads for all three-phase installations.

Featuring multilanguage LCD display, RS232 port, BMS communication interface (DRY CONTACT & MODBUS RTU PROTOCOL BOARD), intelligent slot for SNMP adapter, **AURIGA HP UPS** is real time energy sentinel able to alert you in any situation.

Combining proven performance with technical innovation to deliver pure quality to any mission critical load, **AURIGA HP UPS** is your best choice.

POWERTRONIX
Uninterruptible Power Supply

Via Abruzzi 1, 20056 Grezzago MI Italia
www.powertronix.it +39.02.9096.8648

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Auriga HP

UPS 120 ÷ 200 kVA

MAIN TECHNICAL DATA	AURIGA HP 120	AURIGA HP 160	AURIGA HP 200
UPS Topology	VFI On-Line Double Conversion (Sine-wave form output)		
Converter	Power factor correc, on PFC IGBT-based		
Inverter	High frequency IGBT inverter transformerless		
Sta, c switch	Electronic sta, c switch plus contactor		
Cooling	Forced air & liquid closed circuit		
Input nominal voltage	3Ph+N 380/400/415V		
Input voltage tolerance 100% load	±20%		
Input nominal frequency	50 or 60 Hz		
Input frequency tolerance	40 ÷ 70 Hz		
Power factor	0.99		
So5 start	0 ÷ 100% in 30 sec		
Backfeed protec, on	available		
Input current distor, on	THDi ≤2%		
Bypass nominal voltage	3Ph+N 380/400/415V		
Bypass voltage tolerance	±20%		
Bypass factory sen g	±10%		
Bypass nominal frequency	50 or 60 Hz		
Bypass accepted overload	10In per 100ms		
Manual bypass	with mechanical lock		
Output ac, ve power	108kW	144kW	180kW
Nominal output voltage	3Ph 380/400/415V		
Nominal output current 3ph 3Ph+N@400V	173A	230A	288A
Output power factor	0.9		
Output voltage sta, c varia, on	± 1%		
Output voltage dynamic varia, on	± 5%		
Crest factor	3:1		
Output voltage distor, on linear load	≤ 2%		
Output voltage distor, on non linear load	≤ 5%		
Output frequency	50Hz or 60Hz		
Output frequency stability	0.01%		
UPS system efficiency	≥ 96%		
Overload	125% for 10 minutes 150% for 60 seconds		

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UPS 120 ÷ 200 kVA

MAIN TECHNICAL DATA	AURIGA 120	AURIGA 160	AURIGA 200
BaJ ery type	VRLA AGM or GEL		
Number of elements	360		
BaJ ery nominal voltage	720 VDC		
BaJ ery voltage range	600 ÷ 830 VDC		
BaJ ery maximum charging current	25A		
BaJ ery charging profile	DIN 41733 Charging voltage: 810VDC Temperature compensated baJ ery charging profile		
BaJ ery low threshold (factory se7 ng)	640 VDC		
BaJ ery management & test	Supervised baJ ery management & seJ able regular test		
Remote signals	Dry contact board - remote EPO		
Standard interfaces and protocol	RS232 port & MODBUS RTU + slot for communica, on op, ons		
Monitoring so5 ware	UPSMan & UPSMon		
Communica, on op, ons	web adapter SNMP		
Parallel capability (op, onal)	up to 8 units (cloosed loop via op, cal fiber)		

MECHANICAL DATA			
Case protec, on ra, ng	metal case - RAL 7016 - IP20 (upgrade IP31 on request)		
Dimensions (WxDxH mm)	800 x 830 x 1800 mm		
Weight kg (UPS no baJ ery)	480kg	540kg	590kg
Noise level at 1m	≤ 64dB		
Storaging temperature	-20°C ÷ +70°C (UPS) +20°C ÷ +30°C (BaJ ery)		
Opera, ng temperature	+0°C ÷ +40°C		
Rela, ve humidity	95% non condensing		
Al tude	1000m above MSL without dera, ng (1% dera, ng any 100m up to 2.000m)		
Ven, la, on	mul level fan		
UPS moving	castors		
UPS packaging	overseas shipment suitable cartoon box on fumigated wooden pallet		
UPS packaging dimensions (WxDxH mm)	1000x1000x2100 mm * 70 kg		

STANDARDS	
	European Direc, ves: LC 2014/35/EU low voltage Direc, ve EMC 2014/30/EU electromagne, c compa, bility Direc, ve Standards: Safety IEC EN 62040-1:2008+A1:2013; EMC IEC EN 62040-2 C2 Classifica, on in accordance with IEC 62040-3 VFI - SS - 111 IEC EN 50171 Direc, ve*

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Main electrical features

* Dual input mains: separated or common
* Genset compatibility without any additional equipment
* Integrated maintenance bypass
* Detection circuit for backfeed protection (additional backfeed device UPS built in or in external panel)
* Distributed or shared battery for optimized energy storage and uninterrupted power during strings maintenance
* Battery temperature sensor and supervised battery management dual charging method profile
* UPS *eco-mode* functional profile for 99% efficiency
* Frequency converter profile with or without backup time 60Hz to 50Hz or viceversa

Main electrical optional features

* Parallel capability for redundant or add capacity system configuration (up to 8 units)
* Extended runtime in external cabinet matching UPS design
* Extended runtime in external cabinet IP20 or open rack, complete of DC breaker
* UPS external cabinet galvanic isolation transformer (full system isolation)
* UPS I/O phase voltage and frequency configuration settable via LCD
* UPS upgrade to double independent outputs — EN 50171 standard
* Battery bank disconnection in case of UPS shutdown or according to BMS design
* BACS battery advanced care system for constant monitoring and harmonization of individual charging voltages

UPS connectivity available features for immediate system status info

Real time information, real time solution!

* User friendly Multilanguage LCD (Russian and Chinese available)
* Event log access via LCD for on-site checking & event log download via open software
* Dry contact interface complete of 4 change-over contact outputs
* Serial connection interface via RS232/RS485 Modbus RTU for BMS full compatibility
* At-a-glance user view for simultaneous monitoring of all UPS systems connected in the same network
* Intelligent free slot for additional SNMP interface and ambient sensors (temperature, humidity, smoke etc...)
* UPS MAN & MON software for UPS managing and monitoring
* Remote LED panel for UPS status
* Remote EPO
* Remote UPS monitoring service 24/7 - 365
* Server, PC and/or virtual machine configured shutdown
* e.mail/SMS/pop up UPS status information

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Battery sizing according to time and power value

Grezzago 12/10/2023

UPS model	*AURIGA HP*	
UPS nominal rating	*160,000 kVA*	
Battery string design	*60 x12V DC*	
Sizing method	*IEEE 485*	

Voltage window

Maximum voltage:	*817,20 V DC*	
Minimum voltage:	*600,12 V DC*	
Cell number range:	*360*	

Calculation criteria

U float charge:	*2,27 Vpc*	
Uf interpolated:	*Activated*	
Temperature:	*25 °C*	
Temperature factor:	*1,000*	
Aging factor:	*1,000*	
Margin factor:	*1,000*	
Total factor:	*1,000*	

Power value

Time set:	*30 min*	*pre-set or calculated*
Nominal rating:	*80,000 kVA*	*pre-set*
CosPhi:	*1*	*pre-set*
Efficiency DC-AC:	*98,000 %*	*pre-set*

Battery *calculated*

Battery model:	*SLC 12- 120*	
Battery type:	*VRLA AGM 12V*	
Part code:	*0CBE12 120*	
Number of cells:	*360*	*range: 600,12÷817,2 VDC*
String quantity:	*1*	
Final voltage:	*1,667 V DC*	

Battery bank design

1 string(s) 60x12VDC 120Ah

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Uninterruptible Power Supply

CE DECLARATION OF CONFORMITY

POWERTRONIX S.r.l.
Via Abruzzi 1 - 20056 Grezzago – Milano – Italia
Codice Fiscale e Partita Iva 08305700158
Iscrizione Tribunale n. 258503/6752/3MI - CCIAA n. 1214863 MI

Herewith we declare that below designated Uninterruptible Power Supply models are developed, designed and manufactured in accordance with

European Directive

EC Directive on Electromagnetic Compatibility 2014/30/EU
EC Directive on Low Voltage Directive 2014/35/EU
RoHS Directive 2017/2102/EU replacing 2011/65/EU

UPS Standards

EN 62040-1:2008+A1:2013	UPS: Safety
EN 62040-1-2	UPS: Safety
EN 62040-2	UPS: Electromagnetic Compatibility (EMC)
EN 62040-3	UPS: Performances and tests

Category: Uninterruptible Power Supply

Antares Pro UPS series 1÷10kVA	single phase UPS – tower/rack design
Vector HP UPS series 10÷30kVA	3 phase UPS – tower design
Vector RI UPS series 10÷100kVA	3 phase UPS – rack design
Mizar UPS series 10÷15kVA	3 phase UPS – tower design
Alcor UPS series 20÷40kVA	3 phase UPS – tower design
Coral UPS series 10÷80kVA	3 phase UPS – tower design
Auriga UPS series 60÷100kVA	3 phase UPS – tower design
Auriga HP UPS series 120÷200kVA	3 phase UPS – tower design
Auriga MV UPS series 20÷300kVA	3 phase UPS – modular design
Auriga MV9 UPS series 20÷90kVA	3 phase UPS – modular design
Auriga MS UPS series 100÷800kVA	3 phase UPS – modular design
Hyperion UPS series 100÷300kVA	3 phase UPS – tower design
Vela UPS series 40÷60kVA	3 phase UPS – tower design
Atlas UPS series 80÷120kVA	3 phase UPS – tower design
Supernova UPS series 160kVA÷300kVA	3 phase UPS – tower design

Grezzago (MI)	05-01-2022	Powertronix Srl
(Place)	(Date)	(Signature of the Legal Representative)

CERTIFICATE OF ORIGIN AND QUALITY

POWERTRONIX S.r.l.
Via Abruzzi 1 - 20056 Grezzago – Milano – Italia
Codice Fiscale e Partita Iva 08305700158
Iscrizione Tribunale n. 258503/6752/3MI - CCIAA n. 1214863 MI

Herewith we declare that below designated on-line double conversion U.P.S. (Uninterruptible Power Supply) models are originated in Italy:

Antares Pro UPS series 1÷10kVA	single phase UPS – tower/rack design
Vector HP UPS series 10÷30kVA	3 phase UPS – tower design
Vector RI UPS series 10÷100kVA	3 phase UPS – rack design
Mizar UPS series 10÷15kVA	3 phase UPS – tower design
Alcor UPS series 20÷40kVA	3 phase UPS – tower design
Coral UPS series 10÷80kVA	3 phase UPS – tower design
Auriga UPS series 60÷100kVA	3 phase UPS – tower design
Auriga HP UPS series 120÷200kVA	3 phase UPS – tower design
Auriga MV UPS series 20÷300kVA	3 phase UPS – modular design
Auriga MV9 UPS series 20÷90kVA	3 phase UPS – modular design
Auriga MS UPS series 100÷800kVA	3 phase UPS – modular design
Hyperion UPS series 100÷300kVA	3 phase UPS – tower design
Vela UPS series 40÷60kVA	3 phase UPS – tower design
Atlas UPS series 80÷120kVA	3 phase UPS – tower design
Supernova UPS series 160kVA÷300kVA	3 phase UPS – tower design

We certify that the goods will be supplied of perfect quality and in serviceable conditions.

Grezzago (MI)	05-01-2022	Powertronix Srl
(Place)	(Date)	(Signature of the Legal Representative)

CERTIFICATE

MS CERT

Certificate of Assessment

QUALITY MANAGEMENT SYSTEM

MSCERT's certification is hereby granted to the above company's Quality Management System

POWERTRONIX S.R.L.

Address: Via Abruzzi, 1 – 20056 Grezzago (MI)

Conforming to the standard and scope below

ISO 9001:2015

Scope:

Design, production, sales and servicing of uninterruptible power supplies and solar inverters.

ANZSIC CODE: 2439

CERTIFICATION N °: ITA/QMS/00237/6665

Registration n.: 03

Issued on 06.10.2021

Valid until 05.10.2024

First Issued on 27.10.2012

September 2022

First Surveillance Audit

The Chief Executive

September 2023

Second Surveillance Audit

MS CERT

JAS-ANZ

ACC.No.M4151008IK

MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT IAF

MSCS Critical Location: **MS CERTİFİCATİON SERVİCES PVT. LTD.**, 3/23 R.K.CHATTERJEE ROAD KOLKATA-700042, INDİA.
Local Office (Other Location): **MS CERTİFİCATİON EUROPE S.R.L.**, VIALE FERRUCCI 10 – 28100, NOVARA (NO), ITALY.
☎: +39 0321 3961 - email: management.msce@gmail.com
www.mscertification.net

The validity of this certificate can be verified at www.jas-anz.org/register and www.mscertification.net
The Certificate is valid only if the annual surveillance mark is signed by auditor on original.

F60.rev.05

POWERTRONIX
Uninterruptible Power Supply

Certificate of Training

TO WHOM IT MAY CONCERN

We,

the Italian company **POWERTRONIX s.r.l.**, hereby certify that **Mr. Ion Negru** has successfully completed the Technical Training Course, which has been sponsored by us for the benefit of **Intermed SRL**, located in the Republic of Moldova, that has been held from 6th of February to 09th of February 2023.

Therefore, **Mr. Ion Negru** has been instructed to install, operate, maintain and repair the MIZAR, ALCOR, AURIGA, AURIGA HP, QUASAR, VELA, ATLAS, SUPERNOVA U.P.S. manufactured by **POWERTRONIX s.r.l.**.

Grezzago, Italy, 09th February 2023

Powertronix Srl
Società Unipersonale

Andrea Modenesi

POWERTRONIX
Uninterruptible Power Supply

Certificate of Training

TO WHOM IT MAY CONCERN

We,

the Italian company **POWERTRONIX s.r.l.**, hereby certify that **Mr. Alexandr Grigoret** has successfully completed the Technical Training Course, which has been sponsored by us for the benefit of **Intermed SRL**, located in the Republic of Moldova, that has been held from 6th of February to 09th of February 2023.

Therefore, **Mr. Alexandr Grigoret** has been instructed to install, operate, maintain and repair the MIZAR, ALCOR, AURIGA, AURIGA HP, QUASAR, VELA, ATLAS, SUPERNOVA U.P.S. manufactured by **POWERTRONIX s.r.l.**.

Grezzago, Italy, 09th February 2023

Powertronix Srl
Società Unipersonale

Andrea Modenesi

POWERTRONIX
Uninterruptible Power Supply

Certificate of Training

TO WHOM IT MAY CONCERN

We,

the Italian company **POWERTRONIX s.r.l.**, hereby certify that **Mr. Andrei Guranda** has successfully completed the Technical Training Course, which has been sponsored by us for the benefit of **Intermed SRL**, located in the Republic of Moldova, that has been held from 6th of February to 09th of February 2023.

Therefore, **Mr. Andrei Guranda** has been instructed to install, operate, maintain and repair the MIZAR, ALCOR, AURIGA, AURIGA HP, QUASAR, VELA, ATLAS, SUPERNOVA U.P.S. manufactured by **POWERTRONIX s.r.l.**.

Grezzago, Italy, 09th February 2023

Powertronix Srl
Società Unipersonale

Andrea Modenesi