

# AURIGA MV

The **Auriga MV** product family by Powertronix is a **medium-power modular UPS series**, designed to provide reliable and scalable power for **critical -medium-sized loads**. While granting **extreme redundancy** it also open the way for **future expansions!**

**POWERTRONIX's QUALITY CERTIFIED!**



The AURIGA MV by POWERTRONIX delivers **premium VFI online double conversion**, ensuring power quality ,scalability ,redundancy and power backup for IT corporates, medical, banking, and industrial applications with small to medium power demands.

Thanks to **multi-level IGBT design**, **AURIGA MV** offers the highest reliability and efficiency with a **unity power factor besides** a multilingual LCD display, external interface ports, dual input mains, internal manual bypass, and parallel operation capability.

#### **TYPICAL APPLICATION:**

- Enterprises
- Medical
- Data Centers, Servers
- IT network;
- Transportation

VFI-SS-111

3-3 - PF 1

80 - 300kVA

UPS CABINET PART NUMBER	AMVR30U080K20	AMVR30U120K20	AMVR42U200K20
UPS CABINET NOMINAL RATING	80kVA	120kVA	200kVA
UPS CABINET ACTIVE POWER	80kW	120kW	200kW
UPS POWER MODULE	20kVA/20kW		
UPS MAX SLOT	4	6	10



- A** LCD DISPLAY
- B** LED UPS STATUS
- C** SMART SLOT- RS port
- D** STS / BYPASS MODULE
- E** POWER MODULE

## Input:

INPUT NOMINAL VOLTAGE	3 x 380 / 400 / 415 VAC (3Ph+N)
INPUT VOLTAGE TOLERANCE	305 ~ 478 VAC at 100% load; 304 ~ 208 VAC at < 70% load
INPUT NOMINAL FREQUENCY	50 / 60 Hz (Auto sensing)
INPUT FREQUENCY TOLERANCE	40 ÷ 70 Hz
INPUT POWER FACTOR	>0.99 @ 100% load, >0.98 at 50% load
INPUT THDI	<3% @ 100% load

## Output:

OUTPUT NOMINAL VOLTAGE	3 x 380 / 400 / 415 VAC (3Ph+N)
OUTPUT POWER FACTOR	1
OUTPUT THDV (s)	≤1.5% THD (Linear Load); ≤ 4% THD (Non-linear Load)
OUTPUT V-VARIATION	±2% Typical (unbalanced) / ±1% Typical (balanced)
OVERLOAD	1 hour up to 110%, 10 mins up to 125%, 1 min up to 150% and 200ms for > 150%
OUTPUT NOMINAL FREQUENCY	50/60Hz ±0.1% stability

## Bypass:

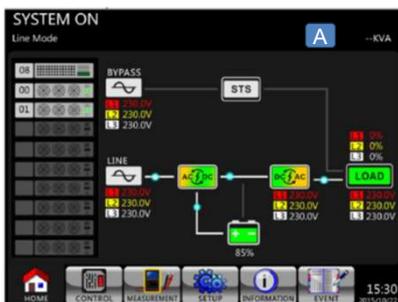
BYPASS V&F	3 x 380 / 400 / 415 VAC (3Ph+N)		
BYPASS VOLTAGE TOLERANCE	+20%/-30% , Factory setting +15%/-20%		
BYPASS OVERLOAD	1 hour up to 110%, 10 mins up to 125%, 1 min up to 150% and 200ms for > 150%		
BYPASS MAX CURRENT	80 kW @ 400V 151 A	120 kW @ 400V 226 A	200 kW @ 400V 378 A

## Battery:

BATTERY CONFIGURATION	32-36-40 Blocks		
BATTERY CABINET	EXTERNAL ,available as option		
CHARGING VOLTAGE	Floating charge: 2,3V/cell or Boost Charge 2,35V/Cell		
CHARGING CURRENT	Normally set for 0,1 C Each AVMPE20 up to 6A		
BATTERY MANAGEMENT	Battery Test ( auto / periodic / User selectable)		

## Environment

PART NUMBER	AMVR30U080K20	AMVR30U120K20	AMVR42U200K20
UPS CABINET			
UPS FRAME (WxDxH mm)	600 x 1100 x 1475		600 x 1100 x 2010
DIMENSIONS			
UPS FRAME WEIGHT	188 Kg (empty) / 325Kg (w/4 x PM20)	208 Kg (empty) / 415Kg (w/6 x PM20)	285 Kg (empty) / 625 Kg (w/10 x PM20)
DIMENSION & WEIGHT	650 x 440 x 132 (3 RU)		
POWER MODULE (WxDxH mm)	34Kg for 20 Kw Power module		





UPS CABINET PART NUMBER	AMVR30U120 K30	AMVR30U180 K30	AMVR42U210 K30	AMVR42U300 K30
UPS CABINET NOMINAL RATING	120kVA	180kVA	210kVA	300kVA
UPS CABINET ACTIVE POWER	120kW	180kW	210kW	300kW
UPS POWER MODULE	30kVA/30KW			
UPS MAX SLOT	4	6	7+1	10



AMVR30U180K30 with 6x30Kw power modules

- A** LCD DISPLAY
- B** LED UPS STATUS
- C** SMART SLOT- RS port
- D** STS / BYPASS MODULE
- E** POWER MODULE

## Input:

INPUT NOMINAL VOLTAGE	3 x 380 / 400 / 415 VAC (3Ph+N)
INPUT VOLTAGE TOLERANCE	305 ~ 478 VAC at 100% load; 304 ~ 208 VAC at < 70% load
INPUT NOMINAL FREQUENCY	50 / 60 Hz (Auto sensing)
INPUT FREQUENCY TOLERANCE	40 ÷ 70 Hz
INPUT POWER FACTOR	>0.99 @ 100% load, >0.98 at 50% load
INPUT THDI	<3% @ 100% load

## Output:

OUTPUT NOMINAL VOLTAGE	3 x 380 / 400 / 415 VAC (3Ph+N)
OUTPUT POWER FACTOR	1
OUTPUT THDV (s)	≤1.5% THD (Linear Load); ≤ 4% THD (Non-linear Load)
OUTPUT V-VARIATION	±2% Typical (unbalanced) / ±1% Typical (balanced)
OVERLOAD	1 hour up to 110%, 10 mins up to 125%, 1 min up to 150% and 200ms for > 150%
OUTPUT NOMINAL FREQUENCY	50/60Hz ±0.1% stability

## Bypass:

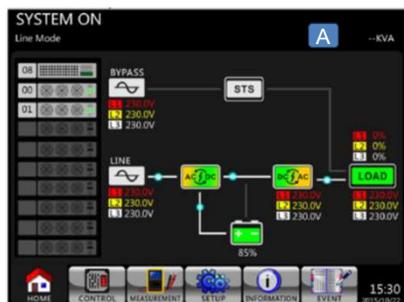
BYPASS V&F	3 x 380 / 400 / 415 VAC (3Ph+N)
BYPASS VOLTAGE TOLERANCE	+20%/-30% , Factory setting +15%/-20%
BYPASS OVERLOAD	1 hour up to 110%, 10 mins up to 125%, 1 min up to 150% and 200ms for > 150%
BYPASS MAX CURRENT	120 kW @ 400V 220 A    180 kW @ 400V 330 A    210 kW @ 400V 380 A    120 kW @ 400V 546 A

## Battery:

BATTERY CONFIGURATION	32-36-40 Blocks
BATTERY CABINET	EXTERNAL , Option available on: AMVR42U120K30 up to 3 string of 40 x 7-9Ah
CHARGING VOLTAGE	Floating charge: 2,3V/cell or Boost Charge 2,35V/Cell
CHARGING CURRENT	Normally set for 0,1 C Each AVMPE30 up to 8A
BATTERY MANAGEMENT	Battery Test ( auto / periodic / User selectable)

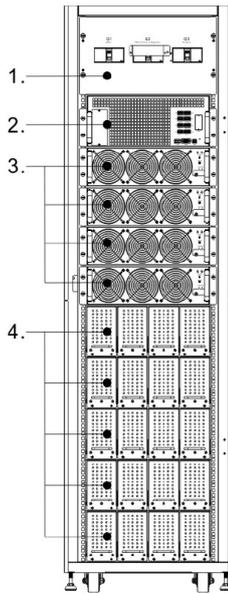
## Environment

PART NUMBER	AMVR30U120 K30	AMVR30U180 K30	AMVR42U210 K30	AMVR42U300 K30
UPS CABINET				
UPS FRAME (WxDxH mm)	600 x 1100 x 1475		600 x 1100 x 2010	
DIMENSIONS				
UPS FRAME WEIGHT	210 Kg (empty) / 360 Kg (w/4 x PM30)	230 Kg (empty) / 440 Kg (w/6 x PM30)	270 Kg (empty) / 550 Kg (w/8 x PM30)	270 Kg (empty) / 620 Kg (w/10 x PM30)
DIMENSION & WEIGHT POWER MODULE (WxDxH mm)	650 x 440 x 132 (3 RU)		35Kg for 30 Kw Power module	



## Environment General

1. Switch Unit
2. STS Module
3. Power Module
4. Battery Module



<b>NOISE</b>	<73 dB @full load
<b>ALTITUDE</b>	≤1000, derate power by 1% per 100m between 1000m and 2000m Asl
<b>DEVICE TYPE</b>	CLASS 3 – IP 20 (Standard)
<b>PROTECTION CLASS</b>	Other IP rating on request
<b>EXTERNAL INTERFACES</b>	Optional: Snmp, Dry contacts, Modbus, Environment monitoring Device Standard: RS232- Epo- Lcd display 5.7”-Vectorial Buttons- Status Led
<b>EUROPEAN DIRECTIVES</b>	LV 2014/35/EU Low Voltage Directive EMC 2014/30/EU Electromagnetic Compatibility Directive CE marks
<b>STANDARDS</b>	Safety IEC EN 62040-1; IEC EN 62040-2 EMC; RoHS Compliance; IEC EN 62040-3 ( Voltage and Frequency Independent) VFI-SS-111

AMVR42 U120K30 with 4x30Kw power modules and bottom battery configuration

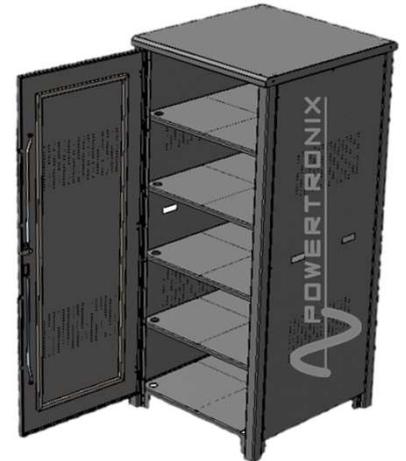


## + BATTERY CABINET

The EN32-XXX or EN40-XXX battery cabinets by Powertronix are expertly designed to accommodate up to 40 battery blocks in a highly efficient and functional structure, maximizing space optimization while ensuring ease of access and superior functionality. The aesthetics of the EN32/40 -XXX battery cabinets are delivering a **practical, solid and visually appealing solution.**

MODEL	DIMENSIONS	WEIGHT	CAPACITY
ENV6168140	610x680xh1400	160Kg	Up to 32x60Ah or 40x40Ah
ENV8198140	810x880xh1400	200Kg	Up to 32x120Ah or 40x80Ah
ENV8189190	810x980xh1900	280Kg	Up to 32x150Ah or 40x140Ah

Customization is a core value of Powertronix's customer-focused approach. Alternative layouts and battery cabinet configurations can be tailored to meet specific space requirements and autonomy demands, ensuring maximum flexibility in both design and size



# POWERTRONIX

## Secure Power

## Innovation That Saves

# AURIGA MV

## Communication Options:

### ➤ + SNMP/TCP-IP

The AURIGA MV series, with the **VN-SNMP** card, allows remote monitoring and management of UPS systems via your **Local Area Network (LAN)**.

Using SNMP protocols, it provides the following key features:

**-Remote Monitoring and Control:** Enables setting custom thresholds to trigger alarms and remotely monitor the UPS status.

**-Event Notifications:** Sends email notifications to the team or selected personnel in case of critical power events.

**-Network-Wide Power Management:** Provides information on power events, facilitates automatic shutdowns, and monitors all UPS units connected to the network.

**-Information Accessibility:** Periodically collects and makes UPS data available to connected applications.



### ➤ + MODBUS RTU

The **VN-MODBUS** card is a communication accessory designed to enhance the **management and control** of AURIGA MV series. Equipped with two RS485 over Rj45 connector, this card enables remote monitoring and control of UPS units, **facilitating integration** with existing RS485/MODBUS network infrastructures.

The card implements the **Modbus RTU protocol**, a widely used communication standard, allowing interfacing via RS485 with a PC or any **Building Management System (BMS)**. This means that the Modbus card not only provides a reliable channel for real-time monitoring of UPS parameters but also allows the collected data to be **integrated into a centralized management system**, improving operational efficiency and responsiveness.



### ➤ + DRY CONTACT

The **AS400** card is a communication accessory that provides **potential-free contacts for remote UPS monitoring**, making it easy to interface with Programmable Logic Controllers (PLC) or signal control panels.

It delivers **critical information** such as UPS failure, alarms, main power failure, bypass activation, low battery warnings, and UPS status (on/off).

These potential-free contacts ensure **isolated signals**, preventing electrical interference between systems. The AS400 card enhances the reliability of the power management system by offering real-time alerts, allowing for quick responses to issues and ensuring the continuous operation of critical systems. This makes it a valuable tool for integrating **UPS monitoring into broader control networks**.



### ➤ + DRY+SNMP

The **S806AS400** Card enables the integration of AS400 functionality with SNMP capabilities in a single solution.

### ➤ + ENVIRONMENT MONITORING

The **VN-EMD** helps to control the ambient condition for proper battery and ups functionality

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