

# VEGA (CPSS) Central Power Supply System



**VEGA is Powertronix's Central Power Supply System (CPSS), specifically designed to supply safety systems and emergency lighting installations in full compliance with EN 50171.**

**100% POWERTRONIX's Quality!**



The **VEGA** series by Powertronix is a Central Power Supply System (CPSS) designed for reliable and compliant emergency power continuity in commercial and light industrial applications. It integrates seamlessly into existing infrastructures, ensuring continuous power supply for emergency lighting and safety loads, with proven inverter reliability and advanced battery management.

#### **TECHNICAL FEATURES:**

- EN 50171 compliant
- VFI-SS-111 architecture
- Continuous overload capability up to 120% (EN 50171)
- Fast battery recharge (>80% within 12 hours)
- Advanced monitoring system

VFI-SS-111

EN 50171

1kVA-30kVA

# VEGA 1-1

CPSS	VEGA 1-1				
<b>NOMINAL POWER</b>	1kVA	2kVA	3kVA	6kVA	10kVA
<b>ACTIVE POWER</b>	900W	1800W	2700W	5400W	9000W
<b>ACTIVE POWER (According to EN 50171)</b>	750W	1500W	2250W	4500W	7500W
<b>PART NUMBER</b>	VGOL01-000	VGOL02-000	VGOL03-000	VGOL06-000	VGOL10-000
<b>INPUT:</b>	<b>NOMINAL VOLTAGE</b> Single Phase 220-240V ( 1P+N+PE)				
	<b>INPUT VOLTAGE RANGE</b> 110 ÷ 300 V 50% Load — 160 ÷ 280 V 100% Load				
	<b>NOMINAL FREQUENCY</b> 50/60Hz				
	<b>INPUT FREQUENCY RANGE</b> 40 ÷ 70 Hz				
	<b>INPUT POWER FACTOR</b> ≥0.99				
	<b>INPUT CURRENT DISTORTION (THDI)</b> THDI ≤3% @100%				
	<b>BYPASS:</b>	<b>BYPASS V&amp;F</b> Single Phase 220/230/240VAC- 50/60 Hz			
<b>BYPASS RANGE</b> Factory setting ±10% (selectable)					
<b>AUTOMATIC BYPASS</b> Available ( Eco-Mode included) 210-264V					
<b>MANUAL BYPASS</b> Available, With Interlock only on 6 e 10 kVA					
<b>OUTPUT:</b>	<b>NOMINAL VOLTAGE</b> Single phase 220/230/240VAC ± 1%				
	<b>VOLTAGE VARIATION</b> ± 1%				
	<b>FREQUENCY</b> 50/60Hz selectable , ±0.1%				
	<b>OUTPUT POWER FACTOR</b> 0.9 up to 40°C				
	<b>VOLTAGE DISTORTION</b> ≤ 2% linear Load & ≤ 3,5 % non linear load				
	<b>OVERLOAD</b> 110% for 10 minutes - 125% for 1 minutes - 130% for 5 seconds				
	<b>OVERLOAD (EN50171)</b> 120% continuous				
<b>BATTERY:</b>	<b>TYPE</b> VRLA				
	<b>CHARGING TIME</b> ≥ 80% in 12 h / 100% in 24 h				
	<b>CHARGING CURRENT</b> Up to 4A on 1-3kVA, up to 6 A on 6-10kVA				
<b>GENERAL:</b>	<b>WEIGHT AND DIMENSION:</b> w/o Blocks				
	282x145x220	397x145x220	421x190x318	369x190x688	442x190x688
	10kg	15kg	18kg	29kg	30kg
	<b>WEIGHT AND DIMENSION:</b> W/Blocks for 60 min Autonomy				
	145x282x220 + 2x BC 145x397x2200	145x397x220 + 2x BC 190x421x318	190x421x318 + 2x BC 190x421x318	190x369x688 + 2x BC190x442x688	190x442x688 + 2x BC190x442x688
	46kg	95kg	130kg	204kg	351kg
	<b>CONNECTION:</b>				
2 x schuko	2 x schuko	2 x schuko + Terminals	Terminals	Terminals	
<b>OPERATING CONDITIONS</b> 0+40°C – UR% up to 95% non condensing, up to 2.000m slm w/o derating (ups only)					
<b>NOISE (dBa@1Mt)</b>					
< 55 ( <40 Eco mode)			< 58 ( <40 Eco mode)		
<b>HMI / INTERFACES</b> Display LCD- USB port- remote EPO – Serial port RS232 - Smart slot for optionals card					
<b>ADD-ON OPTIONAL</b> SNMP, MODBUS TCP-IP, MODBUS RTU, Dry contacts					
<b>STANDARDS</b> CE Marking, complaint for use : EN50171 Safety : EN62040-1; EMC EN62040-2 Performance: EN 62040-3 UE Directive: LV2014/35/UE					



# VEGA TRI

CPSS	VEGA TRI		
<b>NOMINAL POWER</b>	10kVA	20kVA	30kVA
<b>ACTIVE POWER</b>	10kW	20kW	30kW
<b>ACTIVE POWER (According to EN 50171)</b>	8 kW	16 kW	24 kW
<b>PART NUMBER</b>	VG VH10-000	VG VH20-000	VG VH30-000
<b>INPUT:</b>	<b>NOMINAL VOLTAGE</b>		
	Single Phase : 220-240 V ( 1P+N+PE) Three Phase : 380/400/415VAC (3P+N)		
	<b>INPUT VOLTAGE RANGE</b>		
	-50% ÷ +30% @ 50%Load // -30% ÷ +30% @ 100% Load		
	<b>NOMINAL FREQUENCY</b>		
	50/60Hz		
	<b>INPUT FREQUENCY RANGE</b>		
40 ÷ 70 Hz			
<b>BYPASS:</b>	<b>INPUT POWER FACTOR</b>		
	≥0.99		
	<b>INPUT CURRENT DISTORTION (THDI)</b>		
	THDI ≤3%		
	<b>BYPASS V&amp;F</b>		
	Single Phase: 220-240 V ( 1P+N+PE) Three Phase: 380/400/415VAC (3P+N)		
	<b>BYPASS RANGE</b>		
Factory setting ±20% ( Selectable up to 20%)			
<b>OUTPUT:</b>	<b>AUTOMATIC BYPASS</b>		
	Available ( Eco Mode Available)		
	<b>MANUAL BYPASS</b>		
	Available		
	<b>NOMINAL VOLTAGE</b>		
	Single Phase : 220-240 V ( 1P+N+PE) Three Phase : 380/400/415VAC (3P+N)		
	<b>VOLTAGE VARIATION</b>		
± 1%			
<b>BATTERY:</b>	<b>FREQUENCY</b>		
	50/60Hz Selectable , ±0.1%		
	<b>OUTPUT POWER FACTOR</b>		
	Pf1 up to 40°C		
	<b>VOLTAGE DISTORTION</b>		
	≤ 2% linear load & ≤ 3,5 % no linear load		
	<b>OVERLOAD</b>		
110% for 10 minutes- 125% for 1 minute - 130% for 5 seconds			
<b>GENERAL:</b>	<b>OVERLOAD (EN50171)</b>		
	120% continuous		
	<b>TYPE</b>		
	VRLA		
	<b>CHARGING TIME</b>		
	≥ 80% in 12 h / 100% in 24 h		
	<b>CHARGING CURRENT</b>		
Up to 20A (selectable) – Set to 0.1C / 13,5VDC/blocco			
<b>WEIGHT AND DIMENSION:</b>			
w/o Blocks			
<b>WEIGHT AND DIMENSION:</b>			
250x630x750h ( 830mm with Wheels)			
300x815x1000 (with Wheels)			
45Kg			
49Kg			
55Kg			
<b>WEIGHT AND DIMENSION:</b>			
W/Blocks for 60 min Autonomy			
250x630x830h			
250x626x830h			
300x815x1000			
+ BC: 610x680x1400			
+ BC: 810x880x1400			
+ BC: 810x880x1400			
475Kg			
850Kg			
1073Kg			
<b>POWER TERMINALS:</b>			
terminali			
<b>OPERATING CONDITIONS</b>			
0÷40°C – UR% up to 95% non condensing, up to 2.000m slm w/o derating (ups only)			
<b>NOISE (dBa@1Mt)</b>			
< 52 dB			
< 54dB			
<b>HMI/ INTERFACES</b>			
Display LCD- USB port- remote EPO – Serial port RS232 - Smart slot for optionals card			
<b>ADD-ON OPTIONAL</b>			
SNMP, MODBUS TCP-IP, MODBUS RTU, Dry contacts			
<b>STANDARDS</b>			
CE Marking, complaint for use : EN50171			
Safety : EN62040-1; EMC EN62040-2			
Performance: EN 62040-3 UE Directive: LV2014/35/UE			



## Opzioni di integrazione:

### ➤ + SNMP/TCP-IP

The VEGA series, equipped with the VN-SNMP card, enables remote monitoring and management of CPSS systems via the local network (LAN). Using SNMP protocols, it provides the following key functions:

#### **Monitoring and Remote Control:**

Allows the configuration of custom thresholds to trigger alarms and remotely monitor the CPSS status.

#### **Event Notifications:**

Sends email notifications to the team or designated personnel in case of critical power events.

#### **Network Power Management:**

Provides detailed information on power events, supports automatic shutdown procedures, and monitors all UPS units connected to the network.

#### **Information Accessibility:**

Periodically collects CPSS data and makes it available to connected applications.



### ➤ + MODBUS RTU

The **VN-MODBUS** card is a communication accessory designed to enhance the management and control of the VEGA series.

Equipped with two RS485 connectors on RJ45, the card enables monitoring and remote control of CPSS units, facilitating integration with existing RS485/MODBUS network infrastructures.

The card implements the Modbus RTU protocol, a widely adopted industrial communication standard, allowing RS485 interfacing 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 CPSS parameters, but also enables the integration of collected data into centralized management systems, improving operational efficiency and responsiveness.



### ➤ + DRY CONTACT

The AS400 card is a communication accessory that provides volt-free (dry) contacts for remote monitoring of CPSS units, facilitating interfacing with Programmable Logic Controllers (PLCs) or signal control panels.

It delivers critical information such as CPSS fault conditions, alarms, mains power failure, bypass activation, low battery warnings, and CPSS status (ON/OFF).

These volt-free contacts ensure electrically isolated signaling, preventing interference between connected systems. The AS400 card enhances the reliability of the power management system by providing real-time alerts, enabling rapid response to issues and ensuring continuous operation of critical systems. This makes it a valuable solution for integrating CPSS monitoring into broader control networks.



### ➤ + DRY+SNMP

The S806AS400 card combines AS400 dry contact functionalities with SNMP capabilities in a single integrated solution.

### ➤ + ENVIRONMENT MONITOR

The **VN-EMD** helps monitor environmental conditions to ensure the proper operation of batteries and CPSS systems.

**POWERTRONIX**  
**Secure Power**  
**Innovation That Saves**