



Outdoor UPS UP to IP 65

Outdoor UPS for Harsh Environments is a growing category of UPS systems that are built to withstand the stresses of an industrial environment.

With floor space in data centers and other climate-controlled areas at a premium, more UPS systems are operating in harsh environments that can include vibration, dust, and liquid splatter.

These harsh conditions can affect the life span of regular UPS equipment leading to unexpected failures. But Hannibal Outdoor UPS for harsh environments has components, batteries, and enclosures that can meet those challenges.

Up to IP65 is available in Hannibal UPS products, and also for the Outdoor cabinet we can offer ATEX certificate.

GENERAL SPECIFICATIONS —

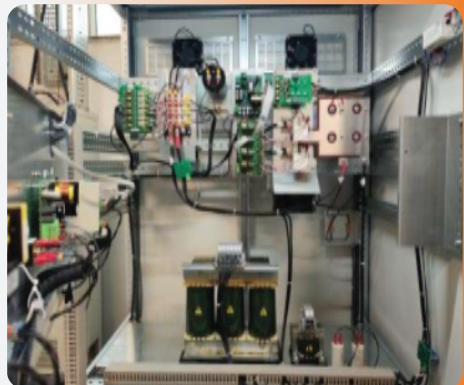
- Input and Output 50Hz, 60Hz, 400Hz frequency optional.
- Output Galvanic Isolation
- On Non-linear loads (computer and switching power supplies) excellent performance
- Intelligent Power Module or IGBT technology full reliability.
- DSP (Digital Signal Processor) control.
- Space-vector control technology
- Low Output distortion factor.
- High efficiency.
- Audible alarm
- User-friendly control panel

OUTDOOR SPECIFICATION —

- IP 55 for the Harsh Environment Protection
- Waterproof and DustFilters
- Operation Temperature between -10 to 55 Degrees
- Air Conditioner
- Roof ventilation
- Sun protection

Hannibal Outdoor UPS — for Harsh Environments are designed to withstand:

- Temperature swings
- Humidity
- Dirt and debris
- Liquid splatter
- Vibration
- Remote or hard-to-access areas



Ex Proof Panel with IP65

Ex-Proof Standards: These panels are certified to meet ATEX (European Directive for Explosive Atmospheres) or IECEx standards.

Materials: Typically constructed from stainless steel or cast aluminum,

IP65 Rating:

- **Dust Tight:** The "6" in IP65 means the panel is completely dust-tight, providing full protection against dust ingress, ensuring no particles can enter the enclosure.
- **Water Jet Protection:** The "5" means the panel is protected against low-pressure water jets from all directions,

TECHNICAL SPECIFICATIONS

POWER (KVA)	
Input Voltage (VAC)	SinglePhase Input: 110VAC/ 127VAC/ 208VAC / 220VAC/ 230VAC / 240VAC Three Phase Input: 3*190VAC/ 3*220VAC/ 3*360VAC / 3*380VAC / 3*400VAC / 3*415VAC (Phase to Phase)
Input Voltage Tolerance	+15 % / -10 %
Maximum Input Voltage	± 20%
Nominal Frequency	50Hz - 60Hz
Frequency Tolerance	± 10%
Rectifier Topology	6 or 12 pulse Thyristor Controlled
Isolation Transformer	-Standard (except 400Vdc Rectifiers)
Output	
Input Voltage (VAC)	SinglePhase Output: 110VAC/ 127VAC/ 208VAC/ 220VAC / 230VAC / 240VAC Three Phase Output: 3*190VAC / 3*220VAC / 3*360VAC/ 3*380VAC / 3*400VAC / 3*415VAC (Phase to Phase)
Power (kVA)	0 to 400kVA
Voltage Stability	± 1%
Rectification Time	Max 25ms.After Boost Charge
Frequency	50Hz - 1000Hz (on-demand)
Frequency Tolerance	+ 2% (synchronized) adjustable, 0.01 (free run)
Efficiency (Operation from DC)	85% to 92%
Total Harmonic Distortion	< 3% @lineerload, < 5% @ non-lineerload
Power Factor	0.8
Crest Factor	3 : 1
Overload	100% - 125% @load 10mins./ 125% - 150% @load 1 min. / >150% load: by-pass
Short-Circuit Protection	Electronic Short Circuit Protection
Technology	Space Vector Control
DIGITAL DISPLAYS	
LCD Display	Output Voltage/ Output Current / Input Voltage/ DC Bus Voltage/ Inverter Frequency / Load Percentage / Load is/isn't powering up
Alarm Notifications (LCD)	Overload / No/Low Input / IGBT Fault/ Over Temperature
Led Display	Input OK / Operation / Common Alarm
Communication	RS232(Standard), Dry Contacts (Standard), RS485(Optional), TCP(Optional), SNMP(Optional), GSM(Optional)
SYSTEM PROPERTIES	
System Design Life	20 years
Protection Class	+ IP55(Optional), (consult to Hannibal for IP56 to IP65)
Storage Temperature	(-20°C) to (+70°C)
Operating Temperature	(-10°C) to (+55°C)
Cooling	Fan Forced Cooling(Standard), Natural Cooling(Optional)
Altitude	000m (-1% Power for every 100m after 1000m) Max. 4000m
Relative Humidity	0 - 95% (Non-condensing)
Noise(1m away)	<55db (SinglePhase),<65dB (ThreePhase)
Color	RAL7035, RAL7032 (Standard), others (Optional)
Cable Entry	Front Bottom (Topentry optional)
STANDARDS	
Standards	IEC 62040-1, IEC 62040-2 , IEC 62040-3 ISO9001, ISO14001, ISO27001, CE UL(Optional)
NOTE:All specifications subject to change without notice. Consult Hannibal's Technical Support Department for special applications. All names used above are registered trademarks of their respective owners.	