

# We will find a product or make a new one

**Outdoor UPS** 

UP to IP 65



### **Outdoor UPS for Harsh Weather and hot places**

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.





# Outdoor UPS







### **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 Dust Filters
- 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,





## Outdoor UPS

#### **TECHNICAL SPECIFICATIONS**

POWER (KVA)

Single Phase Input: 110VAC / 127VAC / 208VAC / 220VAC / 230VAC / 240VAC Input Voltage (VAC)

Three Phase Input: 3\*190VAC / 3\*220VAC / 3\*360VAC / 3\*380VAC / 3\*400VAC / 3\*415VAC (Phase to Phase)

+15 % / -10 % Input Voltage Tolerance

± 20% Maximum Input Voltage 50Hz - 60Hz Nominal Frequency

Frequency Tolerance ± 10%

Rectifier Topology 6 or 12 pulse Thyristor Controlled

Standard (except 400Vdc Rectifiers) Isolation Transformer

OuTPuT

Single Phase Output: 110VAC/ 127VAC/ 208VAC/ 220VAC/ 230VAC/ 240VAC Voltage

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

50Hz - 1000Hz (on-demand) Frequency

+ 2% (schyncronized) adjustable, 0.01 (free run) Frequency Tolerance

Efficiency (Operation from DC) 85% to 92%

Total Harmonic Distortion < 3% @ lineerload, < 5% @ non-lineerload

Power Factor 0.8

Crest Factor 3:1

100% - 125% @load 10mins./ 125% - 150% @load 1 min. / >150% load: by-pass Overload

Short-Circuit Protection Electronic Short Circuit Protection

Space Vector Control Technology

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)

<55db (SinglePhase), <65dB (ThreePhase) Noise (1m away) RAL7035, RAL7032 (Standard), others (Optional) Color

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.



