



STACO EM4

THREE PHASE MODULAR UPS

70 - 350 kW | 480V

APPLICATIONS INCLUDE

- Data Centers
- Blade Servers & High-Density Server Rooms
- BitCoin Mining Servers & Cryptocurrency Operations
- Hospitals, Medical Facilities, & Pharmaceuticals
- Monitoring Stations & Control Systems in Mission-Critical Infrastructure
- Education & Laboratories

PRODUCT FEATURES

- **High Power Density**
Delivers maximum capacity in a compact footprint, reducing space requirements.
- **Modular & Scalable Design**
Enables incremental expansion as power demand increases.
- **Simplified Integration**
Supports both retrofit and new installations with minimal disruption.
- **High Operating Efficiency**
Optimizes energy usage to reduce operating costs by up to 97% in on-line mode
- **Mission-Critical Reliability**
Ensures continuous, dependable power for critical infrastructure and high-availability environments.





PRODUCT OVERVIEW

The Staco EM4 is a modular, high-performance power platform designed for modern, power-intensive environments. It delivers a compact and adaptable solution that supports evolving infrastructure requirements while maintaining consistent performance.

Engineered for flexibility and growth, the EM4 enables organizations to deploy power efficiently and expand capacity as needs change—without unnecessary complexity.

With advanced EM4U power modules, the system scales from 70 kW up to 350 kW in a single UPS, and offers parallel capabilities, providing a resilient power foundation for demanding applications.

KEY BENEFITS

LOWER TOTAL COST OF OWNERSHIP

Reduces upfront investment and ongoing energy costs.

MODULAR & SCALABLE DESIGN

Adapts to demand and future growth.

DEPLOYMENT FLEXIBILITY

Integrates easily into new and existing infrastructures.

BUILT FOR CRITICAL ENVIRONMENTS

Ensures reliable power for high-availability applications



PRODUCT SELECTION CONVENTION

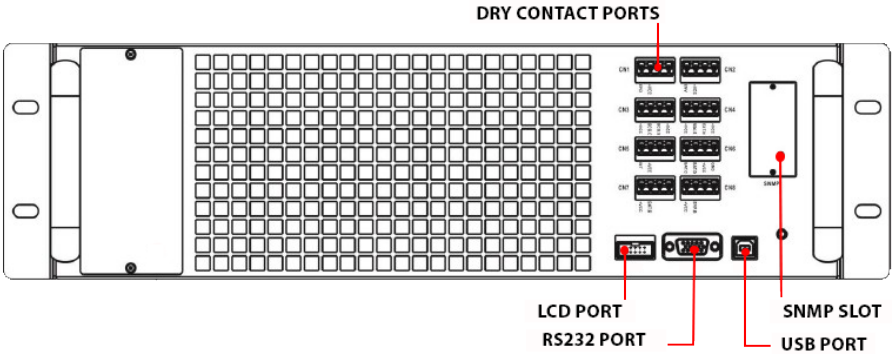
EXAMPLE MODEL NUMBER

EM4	070	P	1	-	00	A	0

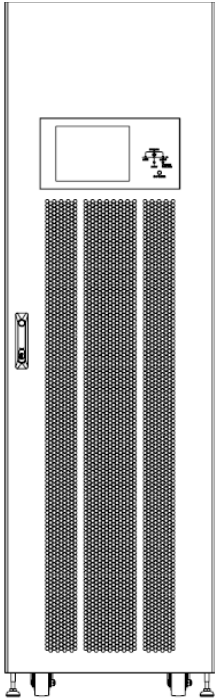
Model	Capacity	Frame	Capacity/Redundant	Internal Batteries	Cable Entry	Communication
EM4	070 70 kW 140 140 kW 210 210 kW 280 280 kW 350 350 kW	P Power ¹	0 Capacity ² 1 Redundant ³	00 None	A Standard	0 None 1 SCV-SNMP 2 SCV-EMDKIT

¹ Up to 350kW max
² No extra module
³ One extra module

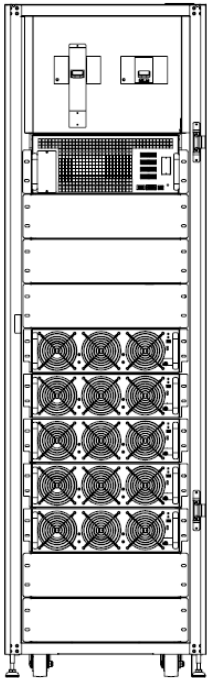
Staco EM4 Static Transfer Switch (STS) Module



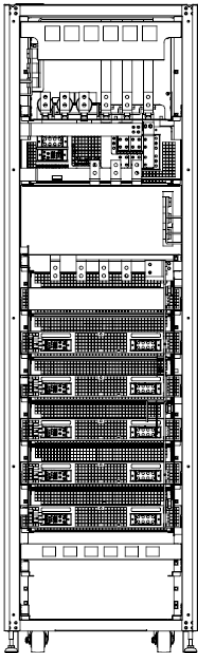
350 kW UPS
Cabinet Front



350 kW Internal Battery
System Front



Internal Battery
System Back



STACO EM4

TECHNICAL SPECIFICATIONS

Input	
Related Voltage	480V three phase, three wire
Related frequency	60 Hz / 50 Hz
Voltage tolerance	330 V - 528 V ¹
Frequency tolerance	40 Hz - 70 Hz
Power factor	0.99
THDI	<4%
Bypass	
Nominal current	110 - 550 A (According to system power configuration)
Rated voltage	480V three phase, three wire
Voltage tolerance	From +10% (adjustable) to -20% (adjustable)
Rated frequency	60 Hz or 50 Hz
Frequency tolerance	+/-1Hz, +/-2Hz, +/-4Hz (default: 4Hz)
Overload	125% for 10 min; 150% for 1 min
Batteries	
Battery arrangement	40 batteries per string w/ central tap neutral
Type	VRLA
Recharging method	18A per module (selectable)
Output	
Rated voltage	480V three phase, three wire
Rated frequency	60 Hz or 50 Hz
Voltage stability	±1%
Overall Specifications	
Cabinet type	EM4U 350 Power Cabinet
UPS nominal power ²	70 - 350 kW
Bypass power	350 kW
Power factor [pf]	1.0
Cabinet layout description	6x EM4U PM (1 redundant)
Dimensions	79.1" H x 23.6" W x 43.3" D / 2,010mm H x 600mm W x 1,100mm D
Weight	627.2 lbs (285 kg) for Base Cabinet; Each module is 96.8 lbs (44 kg)
System noise level	<75 dBA
Cabinet IP rating	IP20
Efficiency ON LINE mode	Up to 97%
Cable Input	Top & Bottom as standard. Cabling in rear of unit
Color	RAL 9005
Ambient temp. for the UPS	32 - 104°F / 0-40°C
Ventilation	Front to rear
Standards	TUV Listed to 1778 CSA C22.2 107. -14, 47 CFR FCC Part 15 Subpart B class A
Moving UPS cabinet types ³	Wheels (cabinets shipped without Power Module (PM))

¹ Conditions apply.

² Power rating between 70 kW and 350 kW can be settled with a selected number of Power Modules.

³ Weight including Power Modules to reach nominal full power.

STACO SERVICE

FIELD SERVICE PROGRAM

Staco specializes in providing choice and flexibility by developing tailored solutions for preventive and remedial maintenance services, as well as emergency repairs for all of our products. Staco Service is built upon a nationwide network of highly trained and motivated customer support engineers and technicians who can provide professional services and care throughout the life of your equipment.

- Start-Ups
- Preventive Maintenance
- Spare Parts
- Battery Analysis/Refresh/Replacement
- On-Site Training
- Time & Material Services
- Maintenance Contracts/ Agreements

WHY STACO ENERGY PRODUCTS?

BECAUSE WE ARE YOUR CUSTOM POWER SOLUTIONS PROVIDER!

Unique application design demands, harsh environment concerns, the need to meet non-standard physical space requirements; providing the "not so usual" is what we do best. From leading edge uninterruptible power supplies, power conditioners, to the world's most stable voltage control systems, we have the technology you need to protect and manage your business, and the knowledge to make it work for you.

Since 1937, customers worldwide have relied on Staco Energy as their custom solutions provider, to solve a wide range of electrical power problems. Headquartered in Miamisburg, Ohio, Staco Energy Products is a wholly owned subsidiary of Components Corporation of America, located in Dallas, Texas.

Voltage Control

UPS & Emergency Lighting



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