ECOBOX RFC 120



REGENERATIVE FUEL CELL UPS SYSTEM

NEW UPS TECHNOLOGY

using a unique water-based, **SELF-REPLENISHING** fuel cell

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RFC 120 offers you the world's only self-replenishing Fuel Cell system in a compact and robust format. The amount of internal solid-state hydrogen storage can be tailored for the backup duration required.

Longer lifetime, longer autonomy and lower total cost of ownership than extended duration battery UPS

The RFC 120 fuel cell system is designed to detect and respond to any interruption in your grid power. Critical equipment now has a more attractive and reliable on-demand UPS backup system.

The system is self-replenishing, using an integrated electrolyser to make Hydrogen, and the integrated storage allows for extremely long autonomy, making it ideal for back-up power in remote and difficult to access sites.

- **→** Extracts Hydrogen from Water
- **→** Safe and reliable Solid-State Hydrogen Storage
- **→** Robust industrial construction and metal casing
- **→** Near-silent operation, can be used in confined spaces
- Data connection for remote monitoring
- **→** Environmentally friendly, extremely efficient
- **→** Long life-time, no self-discharge like batteries

MINIMAL MAINTENANCE IN RESIDENTIAL ELEVATOR UPS

SYSTEM APPLICATIONS

- Elevator emergency UPS
- Emergency Lighting
- Security Systems
- Temporary Signage
- Airfield Lighting





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TECHNICAL SPECIFICATIONS

SYSTEM SPECIFICATIONS RFC 120 - 4H/8H/12H/24H/72H Nominal Operating Voltage Output Nominal Continuous Power Output Start Time after Installation RFC 120 - 4H/8H/12H/24H/72H AC 220V / DC24V /DC48V 120W 120W

Nominal Backup Duration 4 hours (Standard) - 8/12/24/72 hours (Optional)

30 kg

220VAC@1A

Input Power 220W
Input Voltage 220VAC / 24VDC / 48VDC

Hydrogen Storage Metal Hydride

Hydrogen Generation In-built Electrolyser

System Dimensions (WxDxH) L450mm*W120mm*H420mm

Enclosure Material Galvanized steel plate, powder-coated

FUEL CELL SYSTEM

Type PEM Coolant Air

Efficiency 55% Peak Operating

Hydrogen Purity Delivered 99.99% pure hydrogen

Fuel Storage Expandable Solid-State Metal Hydride

IN-BUILT REGENERATION

Total System Weight (kg)

Type of Electrolyser SPE

Water Quality De-Ionized Water

Pressure Range 0-3MPa

OPERATING ENVIRONMENT

Power Demand

Operating Temperature Range 5°C to 50°C

Relative Humidity 0 to 95 % non-condensing

Shipping Freeze Exposure Shipping exposure limit: -20°C

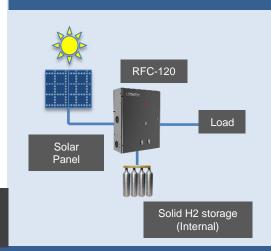
Usage Indoor / Outdoor



OFF-GRID HYBRID SOLAR SET-UP



RFC 120 can be combined with a solar system and small battery bank to provide extremely long autonomy in a very compact footprint. This allows the site to have a significantly smaller PV array and battery bank than would otherwise be required, whilst still enabling extended autonomy of backup power.



Lower Total Cost of Ownership than long-duration battery UPS systems - with ZERO emissions and no heavy metals!

^{*} Specifications are subject to changes.