

# ECOBX MFC 150

PORTABLE INDUSTRIAL POWER SOLUTION



**ECOBX MFC 150** is as quiet as a whisper and has minimal carbon emissions. Its integrated fuel cell uses an electro-chemical process to generate electricity with few moving parts. The **ECOBX MFC 150** operates on a low-volatility methanol-water blend.

The **ECOBX MFC 150** fuel cell system can be configured to connect directly to your load to provide constant, prime power, or connect to your battery to continuously monitor and maintain its charge level.

If your battery voltage drops below a predetermined threshold, the unit automatically starts to carry the load and recharge the battery. This can prevent excessive deep discharge and recharge cycles, thus maintaining longer service life for your battery. After charging is complete, the **ECOBX MFC 150** reverts to standby mode automatically.

- ✦ **Uses low-volatility fuel**
- ✦ **Robust industrial construction and metal casing**
- ✦ **Near-silent operation, few moving parts**
- ✦ **Ensures batteries are always charged**
- ✦ **Perfect to support wind and/or solar power**
- ✦ **Remote monitoring and control functionality**
- ✦ **Environmentally friendly, extremely efficient**
- ✦ **Mobile, light and compact**

## HYBRID SOLAR ECOBOX MFC 150 CONFIGURATIONS

**ECOBX MFC 150** can be combined with a solar system to reduce fuel consumption and provide an even longer lasting power source. If the solar modules can produce adequate electricity, the solar system takes over and **ECOBX MFC 150** goes into standby mode.

## ECOBX MFC 150 RUN TIMES

**ECOBX MFC 150** fuel consumption is approximately 1.2 Liters per kWh of energy produced. A 20L jerry can of fuel mix would provide over 16kWh of electrical power, or a run time of over 160 hours at an average 100W load. Need more run time? Have extra fuel on standby.



## APPLICATIONS

- **Off-grid continuous power**
- **Extended duration backup**
- **Emergency Lighting**
- **Temporary Signage**
- **Emergency Response**
- **Monitoring-Surveillance**

# ECOBIX MFC 150

## PORTABLE INDUSTRIAL POWER SOLUTION



### SYSTEM SPECIFICATIONS

### ECOBIX MFC 150

Maximum Continuous Power	150W
Nominal Current	10.8A
Nominal Voltage (Typical DC)	12-14V
Dimensions (WxDxH)	450*280*220mm
Base Footprint (WxD)	450*280mm
Total Weight	14kg
Enclosure Material	Galvanized steel plate, powder-coated

### OPERATION

Power Conditioning	DC/DC converter
Cold Start Time	Approx. 30 minutes from 20°C ambient temperatures
Hot Standby Start Time	Less than 5 minutes
Fuel Consumption	Approx. 1.2L/kWh (63% Methanol- DI Water Mixture)

### EMISSIONS

Reformer exhaust	CO <sub>2</sub>
Noise	<65 dBA @ 1m
Water	Approx. 0.38L/kWh

### FUEL CELL SYSTEM

Type	PEM
Coolant	Air
Efficiency	Max. 50%
Fuel Type & Specification	63% Methanol – DI Water Mixture
Hydrogen Purity Delivered	99.99% Pure Hydrogen

### OPERATING ENVIRONMENT

Operating Temperature Range	-10°C to 40°C
Relative Humidity	0 to 95% Non-condensing
Shipping Freeze Exposure	Shipping exposure limit: -20°C
Usage	Outdoor stationary
Safety Standards	CE

### CONTROLS & COMMUNICATION

Remote Monitoring	Full remote monitoring via internet
Built-in User Interface	LCD
Communication Connectivity	Serial port RS232 (optional)

\* Specifications are subject to changes.



- Quiet, low-emission power
- Lightweight & compact
- Hybrid solar compatible
- Outdoor enclosure options



The **ECOBIX MFC 150** is a fuel cell system that uses safe liquid fuel, incorporating a highly efficient process for generating hydrogen on demand from an economical Methanol / Water blend.

You have access to electrical power from liquid fuel via the electro-chemical reaction in the fuel cell.

*Like a Generator, But Better!*

