

hydrogen battery



ACTAPOWER
 cube

ACTA POWER CUBE

ACTA POWER CUBE self-recharging fuel cell system is designed specifically for small-scale backup power applications within the railroad, telecommunications, transportation, security and government sectors.

ACTA POWER CUBE provides clean, reliable energy and allows users to avoid the maintenance and frequent substitution of batteries, and the cost and logistics of hydrogen cylinders.

ACTA POWER CUBE uses an Acta electrolyser for the autonomous on-board generation of hydrogen. When powered by renewables, eliminates completely the need for refueling, while drastically reducing overall operating costs and expensive maintenance visits. Incorporates ReliOn's E-200 fuel cell for high reliability, low operating costs and easy maintenance.

ACTA POWER CUBE is a compact 19" rack mountable system that incorporates its own energy management and GSM communication.

TECHNICAL DATA	ACTA POWER CUBE
Fuel cell power output	200W (up to 1100W as optionals)
Fuel cell stabilized voltage output	12 / 24 / 36 / 48V DC
Electrolyser Hydrogen production	100 SL/h
Electrolyser voltage input (DC as optional)	220V AC 50Hz
Electrolyser consumption @ 100% power	0.6 kW
Fuel cell H2 consumption @ 100% power	180 SL/h
Water specification	<10 µS/cm @ 25°C
Communication & Alarms: Remote monitoring and control	Ethernet, dry contacts, GSM remote control, front panel display
Operating temperature	From -5 to +50°C
19" rack module dimensions (WxLxH)	44x48x49cm






ACTA POWER CUBE Applications

- **Wireless Telecommunications**
3G & 4G wireless,
WiMax, Remote radio heads.
Backhaul applications — Microwave & Fibre
- **Wireline Telecommunications**
FTTx, Broadband DLC
- **Government Communications**
Radio repeaters, flight guidance, disaster response,
surveillance & security, microwave communications
- **Transportation Network Communications**
Railroad signalling, traffic signage & signalling



Features:

- Self-recharging fuel cell system generating its own fuel from water
- Provide thousands of hours of highly reliable runtime for critical equipment
- Available with a 100L/h Electrolyzer (250L/h optional) and 200W Fuel Cell (1100W optional) power output in the same cabinet
- Available in both indoor and outdoor versions, depending on applications (roof-top, urban, rural)
- Can operate grid-connected or powered by renewables (solar, wind) for both off-grid and on-grid applications
- Power management and GSM wireless communication with webserver interface for complete remote system management and control.
- The highest hydrogen production efficiency with the lowest hydrogen consumption per kWh produced

	Small	Medium	Large
			
TECHNICAL DATA			
Hydrogen storage pressure	35 BAR	35 BAR	35 BAR
Hydrogen storage capacity	2.1 m3	3.5 m3	5.2 m3
Autonomy at maximum power	12 h	20 h	30 h
Water storage	30 L	30 L	50 L
On-board water purification	n	y	y
Cabinet dimensions	60x60x120 cm	60x60x160 cm	60(120)x60x160 cm

Optional extras available:

- Outdoor cabinet, IP55 rating
- Higher FC and electrolyzer output
- Hydrogen cylinders (5,10 or 50L)
- Water tank (30 or 50L)
- Water purification system:
 - AWG
 - Atmospheric water generator
 - Rain water collection system



hydrogen
battery



Acta S.p.A.

Via di Lavoria, 56/G - 56040 Crespina (PI) - ITALY
Tel. +39 050 64 42 81 - Fax +39 050 64 22 51 - info@actaspa.com
www.actaspa.com - twitter.com/H2Acta