

XX25

MOBILE POWER FOR MOBILE APPLICATIONS

The UltraCell® **XX25™** fuel cell is designed to deliver maximum power at minimal weight to mobile and stationary electronic devices. The XX25 fuel cell will deliver continuous power completely unattended for up to 25 days. When used in a battery backup recharging system much longer deployments (up to two months) are possible.

For remote or covert surveillance applications its small size makes it inconspicuous while its long runtime means that no servicing trips are needed thereby reducing the risk of detection.

The XX25 is an ideal power solution for a wide variety of military and commercial applications:

- ❖ Radio Gear
- ❖ Remote Systems
- ❖ Battery Charging
- ❖ Laptop Computers
- ❖ Mobile Surveillance
- ❖ Satellite Communications



FEATURES AND BENEFITS

- ❖ Operates in many different orientations for maximum flexibility
- ❖ Safe for indoor and in-vehicle use: Emissions meet OSHA standards
- ❖ Reduces weight: 70% or more weight savings for a 72-hour mission
- ❖ Simplifies logistics: Powers different devices with application specific tethers
- ❖ Industry-leading performance: Operates at high-altitude and cold temperatures
- ❖ Operates anywhere: Quiet, rugged design for jungle, desert, and arctic environments
- ❖ Extended runtime: Hot swappable cartridges and optional long runtime external fuel tanks
- ❖ Works with hybrid battery systems to deliver 25 watts of continuous power with higher peak power delivery
- ❖ Smart runtime communications that configures the XX25 to sleep and to wake up when needed to supply power

XX25 SYSTEM SPECIFICATIONS

FUEL CELL SYSTEM

OPERATIONAL MODES	On/Off/Sleep
CONTINUOUS MAX POWER	25 Watts
STARTUP TIME	20 minutes
OUTPUT VOLTAGE	16.8 Volts default with programmable voltage from 12-24 Volts
DASHBOARD SOFTWARE	Options for automated shutdown/sleep and battery recharging
FUEL COMPOSITION	Methanol and water mixture

PHYSICAL SPECIFICATIONS

LCD DISPLAY	MIL Spec NVG compatible, displays remaining runtime and fuel level
CABLES	Application specific tethers available
OUTPUT CONNECTOR	Military specified
DIMENSIONS	9.1" x 5.9" x 1.7" (23cm x 15cm x 4.3cm)
WEIGHT (WITHOUT CARTRIDGE)	2.5lbs (1.14 kg)
COLOR	Sand

ENVIRONMENTAL REQUIREMENTS

OPERATING TEMPERATURE	-4°F to +122°F (-20°C to +50°C)
STARTUP TEMPERATURE	Minimum 32°F (0°C); -20°C with optional Cold Weather Kit
STORAGE TEMPERATURE	-40°F to +140°F (-40°C to +60°C)
OPERATING ALTITUDE	0 to 6,000ft (0 to 1,828m); programmable for full power from 6,000ft to 12,000ft
HUMIDITY	0% to 95% (MIL-STD-810F)
TECHNOLOGY READINESS LEVEL	TRL 7
MIL-STD-810F TESTS PASSED	Humidity, Temperature Cycling, Solar Radiation, Dust, Vibration, Functional Shock, Acidic Atmosphere, Ice & Freezing Rain

FUEL OPTIONS

Option	Weight	Dimensions	Capacity (Whr)	Runtime (20W)
250cc Cartridge	0.76lb (345g)	9.00" x 1.85" x 1.95" (22.50cm x 4.63cm x 4.88cm)	180	9 hours
550cc Cartridge	1.4lb (620g)	9.25" x 2.95" x 2.56" (23.50cm x 7.50cm x 6.50cm)	430	21 hours
XRT-75	3.0lb (1.4kg)	10.50" x 7.00" x 1.50" (26.25cm x 17.50cm x 3.75cm)	1,000	2 days
XRT-200	7.9lb (3.6kg)	12.25" x 5.75" x 5.75" (30.63cm x 14.38cm x 14.38cm)	2,700	5.6 days
XRT-1000	37lb (16.8kg)	18.00" x 9.50" x 10.00" (45.00cm x 23.75cm x 25.00cm)	13,900	28 days



UltraCell®

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