



# ADVENT

Technologies, LLC

Honey Badger™ & UltraCell™ Fuel Cells



MADE IN THE USA

# MOLE™

PN: SY011030

## EXTREME COVERT POWER FOR DEMANDING APPLICATIONS

### A FULLY SELF-CONTAINED COVERT POWER SOURCE

The UltraCell Mole is a fuel cell capable of operating while being buried. It can deliver continuous and uninterrupted power up to 50 Watts. The Snorkel fuel supply is remote and portable and can be replaced while the system is operating. The unit is super quiet, less than 30dB, and emits no detectable bi-products.

The fuel cell is powered by ultra clean, biodegradable methanol, providing quiet, nearly emissions-free operation. It can run continuously off the grid using the existing arsenal of UltraCell fuel cartridges. Its convenient form factor makes it easy for transportation, while its long life means that no servicing trips are needed for highly remote or covert surveillance applications.

The Mole is ideal for a wide variety of high-power electronic applications including radio and satellite communication gear, remote or mobile surveillance systems, laptop computers, and battery charging.

## FEATURES AND BENEFITS

- ❖ UltraCell Methanol Fuel Cell technology does not contain materials which are damaged at temperature extremes
- ❖ Only UltraCell's unique chemistry allows for a single fuel mixture which operates from -30 to +50C unlike other technologies which require desert and winter fuel mixtures
- ❖ Only UltraCell fuel cells can be stored in OFF mode between -30 to +80C without artificial heating unlike other technologies which require complex heating kits for storage below 0C.
- ❖ Only UltraCell fuel cells can startup from a -20C cold soak without additional thermal kits
- ❖ Autonomous operation with sleep mode functionality
- ❖ Safe for indoor and in-vehicle use: Emissions meet OSHA standards
- ❖ 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
- ❖ Simplifies logistics: Powers different devices at different voltages with application-specific tethers





## FUEL CELL SYSTEM

OPERATIONAL MODES	On/Off/Sleep
CONTINUOUS MAX POWER	0 to 50W
OUTPUT VOLTAGE	16.8V default, can be set 10-33VDC
FUEL COMPOSITION	Methanol and water mixture



## PHYSICAL SPECIFICATIONS

CABLES	6-Pin Glenair Mighty Mouse Plug w/3 ft tether: P/N AC781068 GHOST Remote communications module: P/N ACA0052 USB Cable, Waterproof: P/N RM000252 LCD with remote cable: P/N AC00070
OUTPUT CONNECTOR	GlenAir Mighty Mouse
DIMENSIONS	Standard Packaging Without Snorkel Attachment: 16.1" x 6" (40.9cm x 15.2cm)
WEIGHT	10lb (4.53kg) (does not include hybrid battery)
FUEL CONNECTION	Integrated 3ft Tether w/QD (female)



## ENVIRONMENTAL REQUIREMENTS

OPERATING TEMPERATURE	-22°F to +122°F (-30°C to +50°C)
STARTUP TEMPERATURE	Minimum -4°F (-20°C)
STORAGE TEMPERATURE	-40°F to +140°F (-40°C to +60°C)

## FUEL OPTIONS

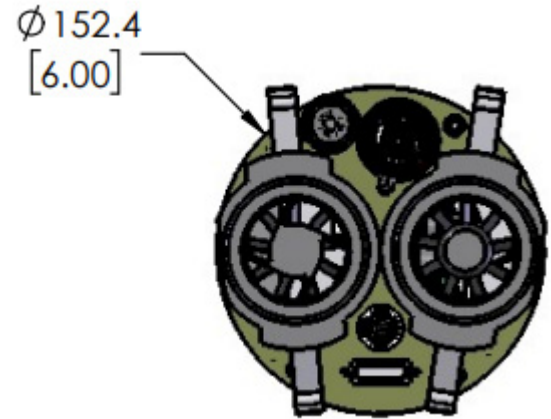
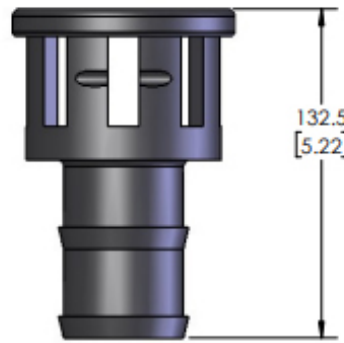
Option	Part Number	Weight	Dimensions	Capacity (Whr)	Runtime (40W)
XRT-500 Cartridges: see separate data sheet					
XRT-75	CRO11052	3.0lb (1.4kg)	10.50" x 7.00" x 1.50" (26.25cm x 17.50 x 3.75cm)	1200	30 hours
XRT-200	AC611000	7.9lb (3.6kg)	12.25" x 5.75" x 5.75" (30.63cm x 14.38cm x 14.38cm)	2,500	2.6 days
XRT-400	AC611004	13lb (5.9kg)	13.2" x 9.8" x 7.5" (33.5cm x 24.9cm x 19.0cm)	5,000	5.2 days
XRT-1000	AC611001	37lb (16.8kg)	18.00" x 9.50" x 10.00" (45.00cm x 23.75cm x 25.00cm)	12,500	13 days

A filling station, CliC-it, is available upon request to re-fill cartridges in the field. UltraCell can assist in sourcing CliC-it certified fuel for onsite refilling.

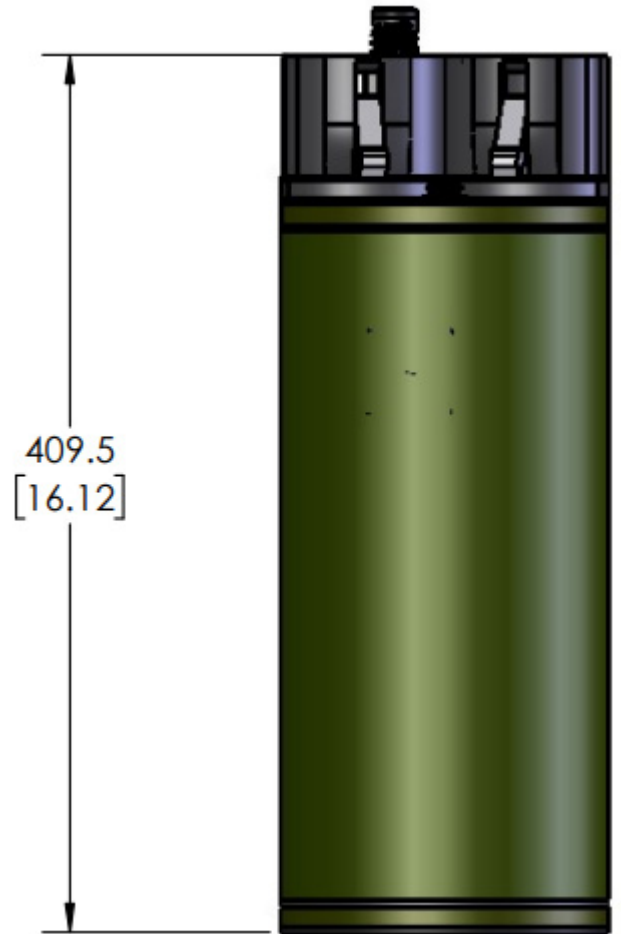
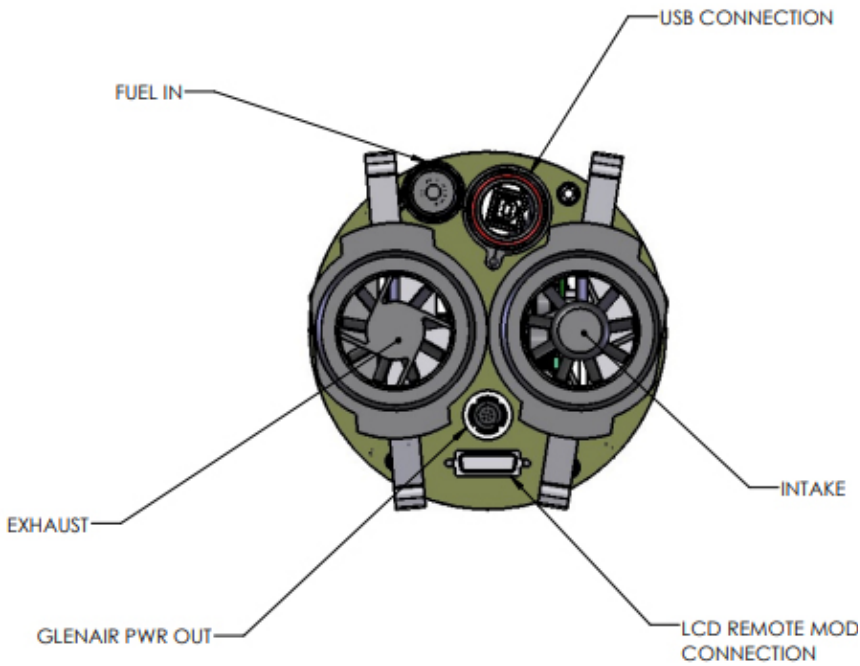




Snorkel caps include water resistant screens for dust and water mitigation.



SNORKEL CAPS, (QTY 2)



**ADVENT TECHNOLOGIES, LLC**

5637 La Ribera Street Suite A Livermore CA 94550 USA

Tel: (925) 455-9400 Fax: (925) 455-7750

www.ultracell-llc.com sales@ultracell-llc.com