

FM-DOME

Fluidmesh Live Tracking System for Long Range Mobility

The Fluidmesh FM-DOME harbors a very powerful antenna system to provide high bandwidth communication over vast distances. When normal wireless broadband communications breakdown, the FM-DOME System delivers an uninterrupted high-bandwidth wireless network with moving vehicles up to 100 MB/sec at 40 kilometers, with ample connectivity over 60 Km. The FM-DOME System requires minimal technical knowledge from its users to deploy broadband communications.

The FM-DOME is preconfigured to automatically locate, lock, and track communication to shore based radios for maximum uptime. The system's ultrafast time-saving features allow workers to focus on the bigger job at hand.



Advanced System Automation

One-touch antenna location and synchronization
Dual axis motors realign for link acquisition

Seamless Installation

Two cables provide both motor control, and data connectivity

Rapid WWAN Provisioning

FM-DOME uses an industry-first wireless search algorithm that scans the horizon for a compatible signal. Once targeting has occurred, the system scans the wireless lobes to locate the center point, providing quick network links at the highest throughput possible.

Dynamic System Tracking & Stabilization

With GPS Lobe Optimization, the system routinely checks connection health to detect and immediately counteract any drops or weaknesses in the wireless signal caused by interference, environmental changes, or sudden platform movement. As platform movement occurs, as seen during a mobile deployment, the system will recalibrate and adjust its position in real-time to compensate for directional changes of the base platform in both axis, azimuth and elevation.

Enhanced Control Unit

Ruggedized and rack mount configurations
SNMP Monitoring & Dynamic Service Level Validation
WWAN link management with available Link Manager
HTTPS/SSH/Telnet Management

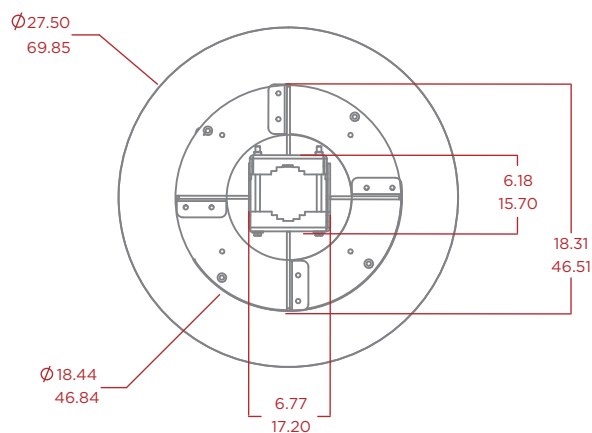
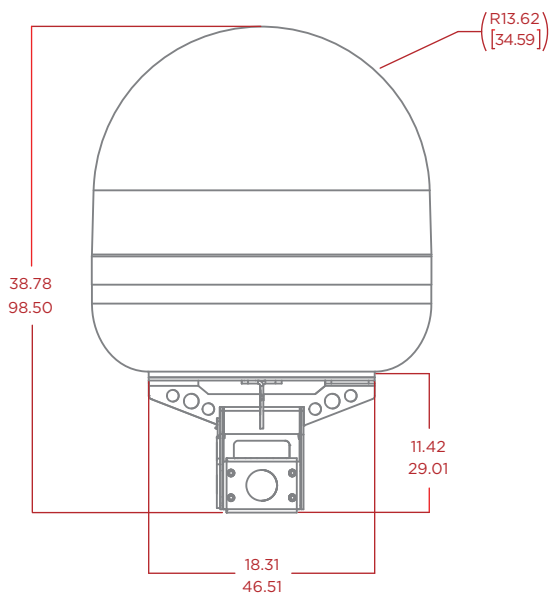
Powered by:
BATS Wireless



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PRODUCT SPECIFICATIONS



Specifications

DVM 30 - Domed Vehicle Mount (30 lb. Payload)

Physical Dimensions	27.5" (Ø) x 38.78" (H)
Weight	70 lbs
Environmental	Standardized to IP-66
Operating Temperature*	-30° or -40°C (w/heater) to 65°C
Pan/tilt-axis Range	360° Continuous / 180° (310°)
Pan/tilt-axis Speed	0°-20°/sec (PAN) 0°-10°/sec (TILT)
Load Capacity	30 lb-ft (max)

RMCU 30 - Rack Mount Control Unit - DVM 30

Physical Dimensions	1.75 inches (H) X 19 inches (W) X 13 inches (D)
Weight	10 lbs
Operating Temperature*	0°C - 55° C (-40°C Option)
Operating Voltage	AC: 90-265 VAC; 47-63 Hz DC: 10-36 VDC w/ Auto
Network Ports	ETHERNET (10/100/1000 Mbps)

Components & Accessories

GPS Targeting Stabilizer	GPS-Based Signal Targeting & Stabilization
Link Manager	Control Appliance for Active Link Failover
Positioning Unit Cabling	PU Power Cables, Available up to 330 ft.
Mil-Spec Ethernet Cabling	Insulated Cat 5e Cabling, Available up to 330 ft.
Mounting Brackets/Hardware	Universal Pole Mount Kits, Radio Mount Kits

*Additional Components Required

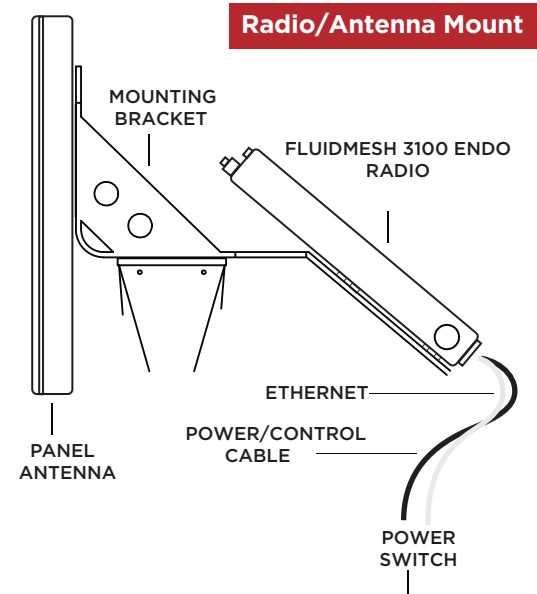
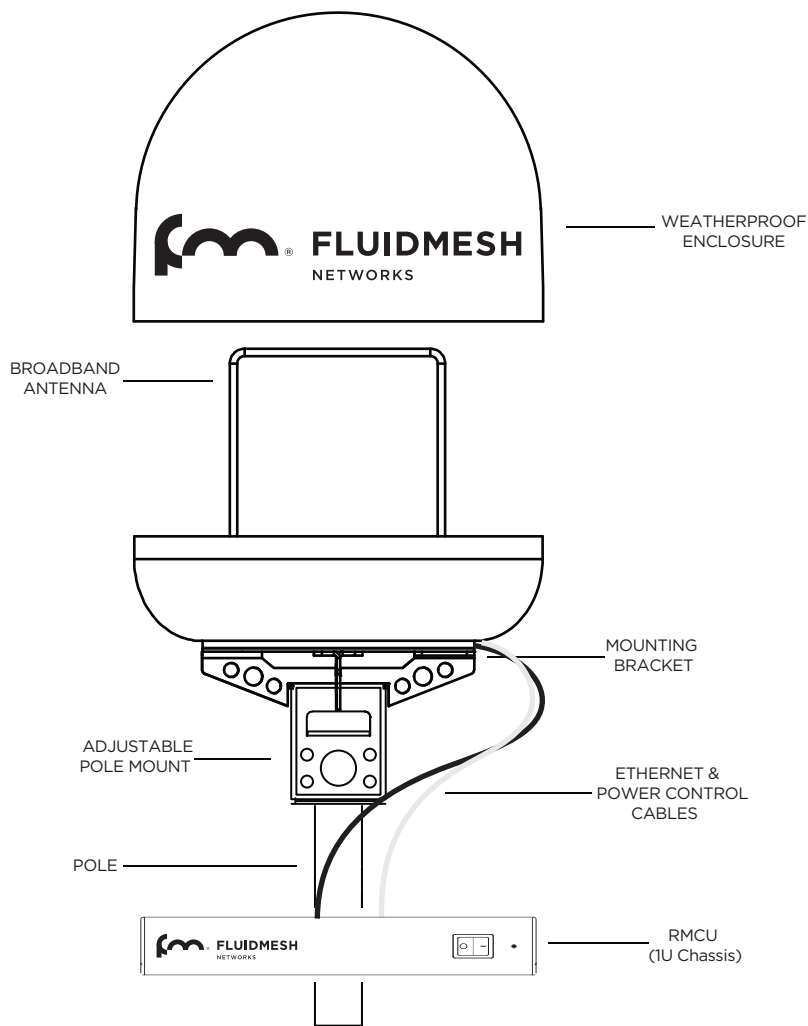
Environmental Testing

MIL-STD 810G, Method 501.5	High Temperature Operating (+65C)
MIL-STD 810G, Method 501.5	Low Temperature Operating: (-30C, -40C)
MIL-STD 810G, Method 501.5	Humidity
MIL-STD 810G, Method 501.5	Salt, Fog
MIL-STD 167-1A, Type I	Vibration - Shipboard
CEI/IEC 60529: 2001	IPx6 (Water Jet Spray), IP6x (Dust)

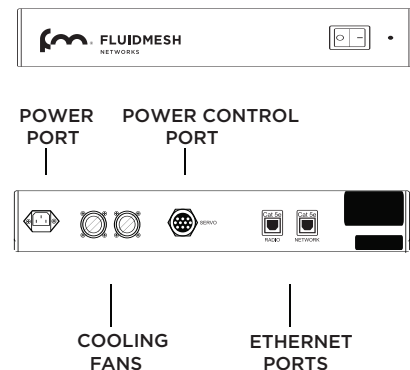
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SYSTEM LAYOUT



RCMU (1U Chassis)



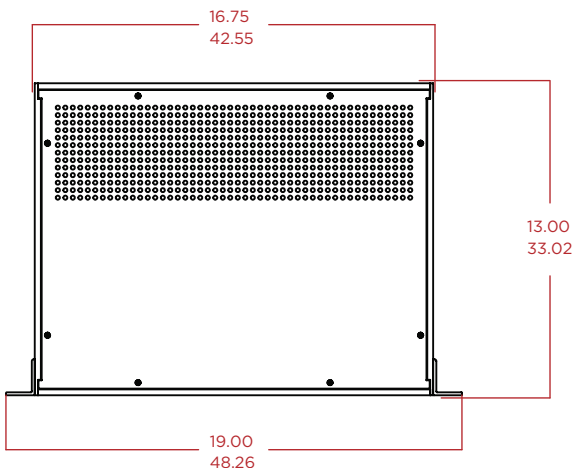
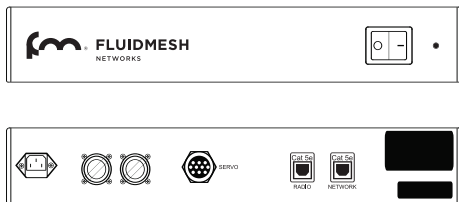
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PRODUCT OVERVIEW and CONTROL UNITS



Rackmount Control Unit



Hardened Control Unit

