

Mobile Surveillance Unit

Solar-autonomous mobile surveillance trailer — 22–30 ft mast, AI detection with live SOC talk-down, NDAA-compliant. Coverage: 5–30 acres per unit, depending on sensor configuration.

< 20 min

Deploy time — one person

24/7

SOC monitoring available

11.8 kWh

Largest battery in class

900W

Bifacial solar array

POWER SYSTEM

Battery chemistry	LiFePO4 lithium
Battery configuration	25.6V · 460Ah
Total energy	11,776 Wh
Usable energy	~10,598 Wh (90% DoD)
Cycle life	3,000+ cycles
Cold weather	Built-in intelligent battery heater — 4-season operation
Solar array	2× 450W bifacial panels = 900W
Solar orientation	Rotating solar mast — operator-adjustable for south-facing
Energy monitoring	Remote battery and solar monitoring included
Shore power / generator	Built-in power supply and battery charger via inlet
Power architecture	Native DC distribution — no inverter
DC outputs	12V · 24V · 48V (top enclosure and bottom chassis)

MAST & STRUCTURE

Mast height	22 ft telescopic · 30 ft available
Mast operation	Manual winch or electric winch options
Mast wiring	Fully internal — protected throughout length
Cable management	Integrated cable reel + slip ring
Power conductors	4× 16 AWG — integrated through mast
Data cable	1× Cat6 — integrated through mast
Stabilization	4 corner jack outriggers — no guy wires required
Site positioning	Built-in forklift pockets
Trailer compliance	DOT-compliant
Tow hitch	2-inch ball — any half-ton vehicle
Tamper protection	Locking mast, chassis, and enclosures
GPS tracking	Built-in

IMAGING

PTZ camera	5MP · 25× optical zoom · 360° pan/tilt
Wide-angle cameras	3× 8MP · 2.8mm wide-angle turret
Storage	Up to 30 days on-board
Remote access	Live + recorded · browser · iOS · Android

CONNECTIVITY

Cellular router	Industrial cellular router
SIM	Dual-SIM + eSIM
Network	4G / 5G
Failover	Automatic multi-SIM failover
Antenna	9-in-1 omni-directional (4G · 5G · GPS · Wi-Fi)

TOP BOX / ENCLOSURE

Location	Top-mounted integrated enclosure at mast head
DIN rail	Included — for PoE switches and networking
Camera mounting	Camera mounting plates included
Deterrence	High-visibility red/blue strobes + strobe controller
Deterrence audio	120 dB horn
Power outputs	12V · 24V · 48V — top and bottom enclosures

PLATFORM & SOFTWARE

VMS	AI VisionStream — cloud-based
Third-party VMS	Full ONVIF / RTSP support
Mandatory subscription	None required
White-label VMS	Available for integrators and dealers
SOC integration	Available

PHYSICAL & COMPLIANCE

Operating temp	22°F to 140°F (30°C to 60°C)
Enclosure rating	IP66+
Compliance	NDAA 889 · FCC · UL
Manufacturing	USA — Pikesville, MD
Warranty	1-year standard · extended plans available