MSU-GLD

Diesel

A diesel-powered mobile surveillance unit delivering 15 kW / 18 kVA at 120 / 240 VAC for surveillance, lighting, site tools and auxiliary equipment. The hydraulic mast reaches 27.9 ft; generator runtime is 62.5 hours at 75% load.

Configuration is subject to final confirmation by Mirtek before procurement. Component ratings apply only to the named component.

Model overview

Power	Diesel
Standard cameras	2 × AXIS P3748-PLVE
Mast height	27.9 ft maximum
Mast rotation	360°
Communications	CAT4 LTE; up to 150 Mbps downlink / 50 Mbps uplink
Audio	15 W outdoor IP horn
Generator output	15 kW / 18 kVA; 120 / 240 VAC
Generator runtime	62.5 hours at 75% load
Fuel tank	240 L (63 US gal)

Platform & power

Power source	Diesel generator
Generator output	15 kW / 18 kVA
Output voltage	120 / 240 VAC
120 V receptacles	(4) 20 A / 120 V GFCI duplex receptacles
240 V receptacles	(2) 30 A twist-lock receptacles + (1) 50 A twist-lock receptacle

Operating concept	Diesel-powered; onboard generator provides power for surveillance equipment, lighting and auxiliary loads
Mast height	27.9 ft maximum
Mast rotation	360°
Lifting system	Hydraulic mast system
Stabilizers	4 outriggers / stabilizers
Overall dimensions	122 in L × 57.5 in W × 95 in H
Base unit weight	2,645 lb
Maximum wind rating	110 kph (68 mph)
Fuel	Diesel
Fuel tank capacity	240 L (63 US gal)
Fuel consumption	2.8 L/hr @ 50% load; 4.0 L/hr @ 75% load; 5.4 L/hr @ 100% load
Generator run time	62.5 hours @ 75% load
Lighting output	4 × 320 W LED / 180,000 lumens
Secondary fluid containment	110%
Structure	Heavy-duty trailer-mounted enclosure with hydraulic galvanized telescoping mast

Standard surveillance cameras

Quantity	2
Camera model	AXIS P3748-PLVE
Sensor configuration	4 × 8 MP sensors per camera
Video resolution	4 × 3840 × 2160 (4K) per camera
Frame rate	Up to 12.5/15 fps per channel

Horizontal field of view	360° total (103°–41° per sensor)
Pan / tilt / roll	Remote PTRZ adjustment
Low-light performance	IR illumination; 0 lux B/W with IR on
IR range	20 m at 0 lux; 30 m at 0.2 lux
WDR	Forensic WDR up to 120 dB, scene dependent
Video compression	H.264, H.265 and Motion JPEG
Analytics	Edge-based AI analytics including human/vehicle detection, line crossing, object-in-area, occupancy and motion scenarios
Environmental rating	IP66 / NEMA 4X / IK10
Camera operating temperature	-40°C to 50°C; PTR functionality to -30°C
Camera power	PoE, IEEE 802.3af/802.3at Type 2 Class 4; typical 10.9 W, max 23.6 W per camera

LTE communications

Gateway type	CAT4 LTE IoT Ethernet gateway
Cellular performance	Up to 150 Mbps downlink / 50 Mbps uplink over air
LTE bands	B2, B4, B5, B12, B13, B14, B66, B71
WCDMA bands	B2, B4, B5
Ethernet	10/100/1000 Mbps Gigabit Ethernet
USB	USB 2.0
Networking	IPv4 / IPv6, TCP, UDP, DHCP, HTTP, SNMP, FTP, DNS, MQTT and related network protocols
Security	Firewall, ACLs, VPN, IPSec, GRE / VPN tunnelling, HTTPS and access controls
GPS	Integrated GPS support; up to 5 Hz update rate

Operating temperature	-40°C to +85°C
Dimensions	Approx. 1.75 × 1.75 × 1.35 in

Video control & alarm bridge

Video channels	8
Video alarm zones	8
Alarm handling	Real-time video alarms and notifications
Integration	ONVIF event messaging; integration with AI cameras and server platforms
Audio	IP and analog audio output
Central monitoring	Supports live video monitoring, live audio broadcasts and remote control with additional hardware
Network	10/100 Ethernet, RJ45
Power	12 VDC or PoE, IEEE 802.3af Class 3
Peak power consumption	10.5 W
Security	TLS / SSL
Dimensions	150 × 98 × 35 mm (5.9 × 3.86 × 1.38 in)
Weight	265 g (0.6 lb)

Audible warning & communication

Speaker type	15 W outdoor IP horn speaker
Environmental protection	IP67 waterproof
Maximum SPL	113 dB
Frequency response	300 Hz–8 kHz
Amplifier	Built-in 15 W amplifier

Network interface	10/100 Base-TX, RJ45
Protocols	SIP, ONVIF, HTTP, IPv4, DHCP, RTSP, RTP, TCP, UDP and related network protocols
Audio	Network audio with support for multiple common audio codecs
Alarm input	1 channel
Power	PoE or 12–24 VDC
Operating temperature	-30°C to +60°C
Humidity	5–85%
Dimensions	285 × 205 × 290 mm
Weight	1.3 kg

On-board computer

Computer type	Fanless mini PC
Processor	4-core / 4-thread processor, up to 3.6 GHz, 8 W TDP
Memory	16 GB RAM
Storage	512 GB SSD
Storage expansion	M.2 2280 SATA/NVMe expansion; microSD support
Networking	Dual-band Wi-Fi 5, Bluetooth 5.1, Gigabit Ethernet
Video outputs	2 × HDMI 2.0 plus USB-C video output
Data I/O	USB 3.2, USB 2.0, USB-C, RJ45 Ethernet, 3.5 mm audio
Unattended operation	Auto power-on, Wake-on-LAN, PXE/iPXE boot and RTC wake support
Physical dimensions	Approx. 5.2 × 3.2 × 0.7 in
Weight	Approx. 0.44 lb

Lighting & warning

LED strobe lights	Integrated LED strobe warning lights
Tower lighting	Integrated LED tower lighting; 4 × 320 W LED / 180,000 lumens

System integration

Standard configuration	2 × AXIS panoramic multi-sensor cameras + CAT4 LTE gateway + 8-channel video control bridge + 15 W IP horn + on-board fanless mini PC + LED strobe lights
Camera customization	Camera quantity, model and analytics configuration can be customized
LTE customization	LTE hardware and connectivity configuration can be customized
Monitoring	Networked surveillance and alarm architecture suitable for integration with remote monitoring services

Notes & limitations

1. Specifications describe the stated configuration and are subject to configuration, component availability and manufacturer revisions. Confirm the final configuration with Mirtek before procurement.

2. Component ratings apply to the named component, not to the entire assembled surveillance unit. Cellular throughput is a stated maximum; actual speeds depend on coverage, carrier and network conditions.

3. Final electrical protection, inlet, grounding, disconnecting means and installation requirements must be confirmed for the deployment and applicable electrical code.

Discuss your configuration

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