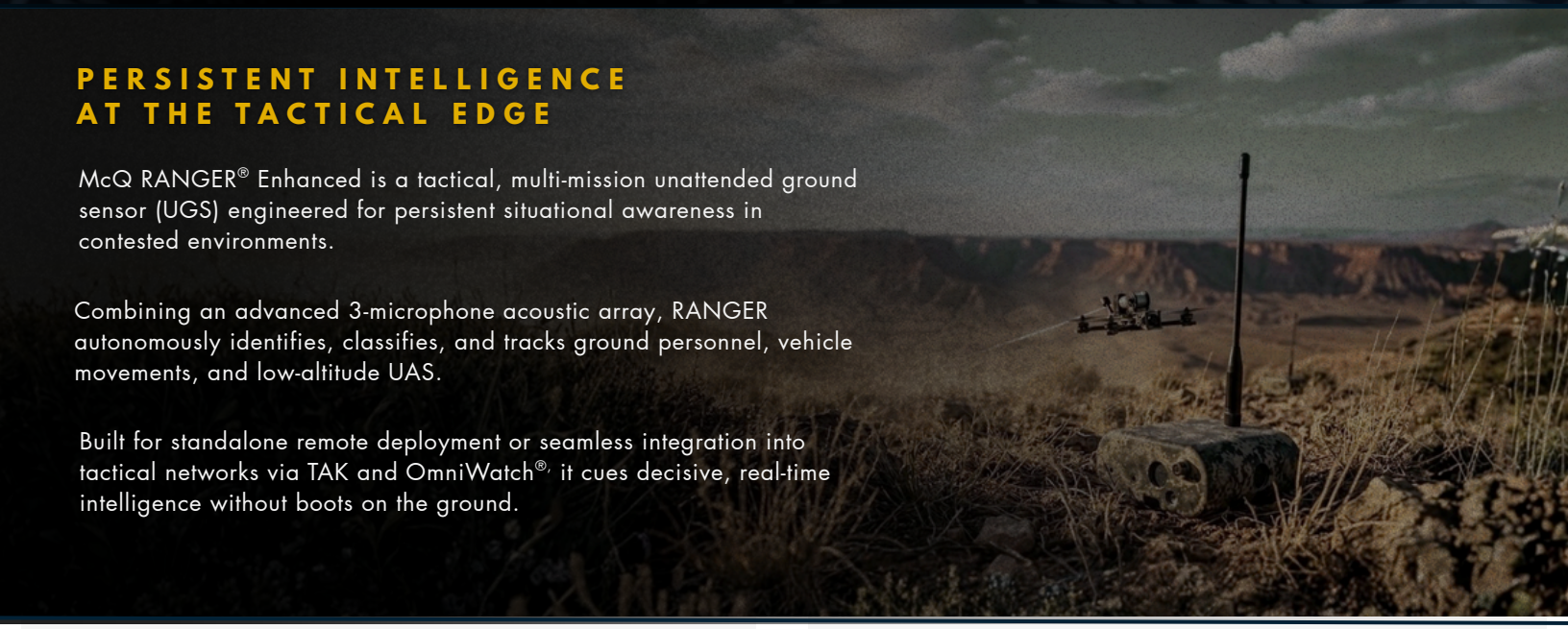
McQ RANGER®

SERIES: ENHANCED
SOLUTION: UNATTENDED GROUND SENSOR

McQ PERSISTENT INTELLIGENCE. ANYWHERE.



PERSISTENT INTELLIGENCE AT THE TACTICAL EDGE

McQ RANGER® Enhanced is a tactical, multi-mission unattended ground sensor (UGS) engineered for persistent situational awareness in contested environments.

Combining an advanced 3-microphone acoustic array, RANGER autonomously identifies, classifies, and tracks ground personnel, vehicle movements, and low-altitude UAS.

Built for standalone remote deployment or seamless integration into tactical networks via TAK and OmniWatch®, it cues decisive, real-time intelligence without boots on the ground.

3 MICROPHONE ARRAY TRACKING FOR ADVANCED DETECTION & CLASSIFICATION

Fusion: Combines acoustic & seismic signals to enhance the detection capabilitys

Quick Response: Reports the first detection from any algorithm that is enabled

OPERATING MODES & DETECTION RANGES

Rural Mode: Long range performance in remote locations
Urban Mode: High activity environments

Algorithm	Detection	Urban	Rural
Seismic	Personnel	20 m	30 m
	Civilian Vehicle	n/a	140 m
	Commercial / Tracked Vehicle	n/a	225 m
Magnetic	Vehicle	5 m	n/a
Acoustic	Speech	20 m	n/a
	Vehicle	n/a	30 m
	Propeller Plane	n/a	4000 m
	Helicopter	n/a	2000 m
	Class 1 UAS	350 m	350 m

INTERFACE SOLUTIONS

OmniWatch®, OmniWatch® Tactical, OmniWatch® Enterprise
Third Party Integration via COT, XML, JSON
Compatible with TAK Server

SOLUTIONS TO ENHANCE RANGER'S CAPABILITIES

Base Station Repeater
vWatch® Intelligent Camera System
McQ OWL®

REQUIRED ACCESSORIES

OmniWatch® Tactical
Wireless Mobile Relay (WMR)
Iridium Satellite Subscription*

SUPPLIED ACCESSORIES

Tactical Whip Antenna: S463AM-915
Global Whip Antenna: M1600HCT-P-SMA
Tethered Antenna: ALPHA8/3M/SMAM/S/S/11
Qi-Certified Wireless Charger
Charger Block & Cable

OPTIONAL ACCESSORIES

Solar Panel & Power Cable** AC-1912
Single Battery Box & Power Cable** AC-1932
Power Cable with Bare Wire Access** AC-1951.16-3

* *Global Model*
** *PLUS+ Model*

Transmission Power	Tactical:1 Watt Global: 6.5 Watts Peak
Antenna Gain	Tactical: +2 dBi Global: +2.8 dBi
Encryption	AES 256
Geolocation	GNSS Receiver
Power In	9-18V: 0.5A On PLUS+ Models only
Internal Battery	Rechargeable Li-ion
Battery Cert	UN38.3
Operating Temp	–20 to 65 °C
Environmental	IP67 MIL-STD-810
Export Classification	EAR99 & ITAR Controlled
RANGER Enhanced Modes	Please contact McQ for specifications of our military proprietary, cutting-edge detection & classification capabilities.

					
SKU	RA-K3001	RA-K3002	RA-K4003	RA-K4002	RA-K4001
Product	Enhanced Tactical	Enhanced Tactical PLUS+	Enhanced Global	Enhanced Global PLUS+	Enhanced Global Air
Placement	Hand Emplaced	Hand Emplaced	Hand Emplaced	Hand Emplaced	Air Drop
Communication	Radio	Radio	Iridium	Iridium	Iridium
Frequency Range (MHz)	902-928	902-928	1616–1626.5	1616–1626.5	1616–1626.5
Battery Life	Up to 90 days	Up to 90 days	Up to 90 days	Up to 90 days	Up to 90 days
Battery Feature	Internal Battery Only	Battery Connector	Internal Battery Only	Battery Connector	Internal Battery Only
With Battery Box		Extends up to 1 additional year†		Extends up to 1 additional year†	
With Solar Panel		Indefinitely		Indefinitely	
Dimensions (mm)	76 x 90 x 216	87 x 90 x 216	76 x 90 x 85	87 x 90 x 85	76 x 90 x 38
Weight (g)	330	340	310	335	325

†Extreme temperatures can impact the life of the battery

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