

FALCON WATCH™**RF-5400VH REMOTE
SURVEILLANCE SYSTEM****Rugged, Easy-To-Use
Intelligent Remote Sensing**

The Harris Falcon Watch™ Remote Surveillance System provides a complete solution for unattended sensing of personnel and/or vehicles in harsh environments. Covertly deployed on the front line, Falcon Watch RF-5400VH-SS Mini-Sensors and RF-5400VH-MS Multi-Sensors process input from seismic, magnetic, and passive infrared detectors, and transmit alarms when valid events occur. The system transmits alarms using voice and/or data messages. Voice alarms can be received with tactical voice radios, including the FALCON® II RF-5800M-HH Advanced Multiband Tactical Radio, eliminating the need for separate monitoring equipment. Data alarms can be received by the Falcon Watch RF-5405VH-GW Intelligent Gateway for cueing the Falcon Watch RF-5408-RI Remote Imager and for long-haul connectivity using the Iridium Satellite System.



The Falcon Watch Mini-Sensor is a small, lightweight, and easy-to-deploy single detector device. The Falcon Watch Multi-Sensor can be configured to transmit an alarm on a certain combination or sequence of multiple detector events. Mini- and Multi-Sensor nodes incorporate health checks so they can notify the user if they have been tampered with, or if battery power is low. Processing is incorporated in each sensor to filter extraneous events caused by animals or ambient noise levels while still offering very long operational life using off-the-shelf batteries. The Falcon Watch RF-5400VH-RU RF Relay can be used to extend the communication range of the sensors.


The Falcon Watch Surveillance System is modular and scalable, making it the perfect choice for a variety of missions from force protection, to perimeter surveillance, to remote monitoring.






Heighten your *senses*.

SPECIFICATIONS FOR THE RF-5400VH REMOTE SURVEILLANCE SYSTEM

Falcon Watch™ Sensors	RF-5400VH-MS Multi-Sensor 	RF-5400VH-SS Mini-Sensor 
Frequency Band	138–174 MHz (8 MHz Band)	138 – 174 MHz (Full MHz Band)
Transmit Output	2.5 Watts	1.5 W
Detectors	One Seismic and Two PIR or Magnetic	One Seismic or PIR or Magnetic
Operational Life (100 alarms/day)	1 year (Data Mode), 2 months (Voice Mode)	6 months (Data Mode), 1 month (Voice Mode)
Sensor Processing	Animal Filter, Multiple Sensor Qualification, Step Count	Animal Filter, Step Count
Other I/O	Switch Input, Trigger Output	Switch Input, Trigger Output
Configured By	12047-4120-01 Falcon Watch MPA	12047-4120-01 Falcon Watch MPA, Switches on Unit
Radio Interoperability	RF-5800M-HH (Voice Report) or other FM Receiver	RF-5800M-HH (Voice Report) or other FM Receiver
Scheduling	Time Of Day/Day Of Week	
Alerts	Low Battery, Health Status, Tamper (Cable and Unit)	Low Battery, Health Status, Tamper (Cable and Unit)
Power Source	Eight Lithium 9-Volt Batteries	Two Lithium 9-Volt Batteries
Operating Temperature	-20°C to +65°C	-20°C to +65°C
Immersion	1 meter	1 meter
Environmental	MIL-STD-810F	MIL-STD-810F
Size (w/batteries)	27.3L x 13.0W x 4.6H cm (10.8L x 5.1W x 1.8H in.)	9.2L x 7.9W x 5.1H cm (3.6L x 3.1W x 2.0H in.)
Weight (w/batteries)	1.9 kg (4.2 lbs)	0.36 kg (0.8 lbs)

Falcon Watch RF Relay	RF-5400VH-RU RF Relay 
Frequency Band	138–174 MHz (Full Band) Independent RX & TX Frequencies
Transmit Output	1.5, 5.0 W (Selectable)
Sensor Interoperability	RF-5400VH-MS, RF-5400VH-SS and RF-5400VH-AS
Power Source	Two External BA-5390 Batteries (12047-2431-03 Small Battery Bag), Six External BA-5390 Batteries (12047-2432-03 Large Battery Bag)
Operating Temperature	-20°C to +65°C
Immersion	1 meter
Environmental	MIL-STD-810
Size (w/o batteries)	17.5L x 15.3W x 4.6H cm (6.9L x 6.0W x 1.8H in.)
Weight (w/o batteries)	1.0 kg (2.1 lbs)

Falcon Watch™ Detectors	12047-371X Seismic Detector 	12047-372X Magnetic Detector 	12047-373X Passive InfraRed (PIR) Detector 
Typical Range	50 m (150 ft.) vehicle 15 m (50 ft.) personnel	25 m (75 ft.) vehicle 3 m (10 ft.) personnel	Standard: 100 m (300 ft.) vehicle 50 m (150 ft.) personnel Long Range: 200 m (600 ft.) vehicle 100 m (300 ft.) personnel
Cable	RF-5400VH-SS: 1.5 m (5 ft.) RF-5400VH-MS: 8 m (25 ft.) Both: 15 m (50 ft.) Extendable	RF-5400VH-SS: 2.5 m (8 ft.) RF-5400VH-MS: 8 m (25 ft.) Detachable	RF-5400VH-SS: 2.5 m (8 ft.) RF-5400VH-MS: 8 m (25 ft.) Detachable