

See First, Understand First, Act First and Finish Decisively.



## WatchMaster® Pro

The DRS WatchMaster® Pro brings military technology to security and force protection requirements in a small and inexpensive product built to operate in hostile environments. DRS developed the WatchMaster® Pro modular imaging system based on the DRS 640 x 480 uncooled cameras with multiple lens options. WatchMaster® Pro embraces high performance in a small package and is designed to be configurable for different applications.

As a system, WatchMaster® Pro is completely upgradeable with new camera blocks by the user in the field. No other competing product on the market can match the performance and quality of WatchMaster® Pro.

WatchMaster® Pro uses the Quickset QPT-LT dual side-mount positioner, which can be configured with single or multiple camera blocks for day and night capability. With exceptional resolution and sensitivity, WatchMaster® Pro offers 24-hour capability for enhanced situational awareness.



## HIGHLIGHTS

- DRS uncooled thermal imaging technology
- Compact/Light weight
- Quick-change camera modules (blocks) with true plug-n-play
- Network controllable or dedicated (Unicom®-LT) controller
- Mobile and invertible
- Full two-way communication
- MIL-STD-810F, IP67 (tested) sealed and pressurized camera housings
- Full range of mounting fixtures



## SYSTEM FEATURES

### GENERAL

Video Output	RS-170 (NTSC)
Control Interface	RS422/RS485
Power Consumption	10 - 30 VDC with reverse polarity protection
Weight	<30 pounds with dual cameras
Size	16.5 x 12.7 x 8.1 inches
Enclosures	IP67, sealed and pressurized camera enclosures; marine resistant paint, bearings and gaskets; stainless steel HW, aluminum housings
Operating Temperature	-32° C to 55° C (-26° F to 131° F)
Pan Range	360° continuous
Pan Speed	0.25° - 100°/seconds
Tilt Range	-90° to + 90° non-continuous
Tilt Speed	0.25° - 60°/seconds
Motor Type/Drive	Steppers with belt drive
Microprocessor Control	32 presets and 2 preset tours

### THERMAL CAMERA

Detector	Uncooled Vanadium Oxide (VOx) Microbolometer
Frame Rate	30 Hz
Resolution	640 x 480
Spectral Response	LWIR, 8-12 µm
Thermal Sensitivity	50 mK
HFOV	9°
VFOV	6.9°
Focus	Motorized
Gain/Level	Automatic gain control or manual
Zoom	3X electronic
Performance	2.2 km detection range for standing human (see note 1)

### CCD CAMERA

Narrow FOV	1.6°
WFOV	42°
Zoom	Optical 26X, digital 12X, total 312X
Minimum Illumination	1.0 lux typical

Note 1 – Performance value shown is for the following conditions: a) target size is 1.8 x 0.5 meters; b) target contrast temperature is 2° C; c) probability of detection is 70%; and d) the atmosphere is described by the 1976 US Standard Model, with the Rural – 23 km Aerosol Model, and with low turbulence.

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