

# MOBILE Helios

Mobile Thermal Surveillance System



## DESCRIPTION:

The Mobile Helios Surveillance System has mounted a telescoping mast on an easily transportable trailer. A Helios Thermal Surveillance System with a thermal imaging camera, co-located with a 36X color CCD camera with 12X digital zoom, and a Pan & Tilt unit, is located on the mast. A Wireless Video/Data Transmitter is also located on the mast. Solar Panels and deep cycle batteries complete the system.

Designed to operate 7 days without solar renewal, the Mobile Helios sets up in 15 minutes and requires no tools to deploy. This turnkey day/night surveillance system allows users to remotely access and control the camera up to 15 km away via a wireless PTP Ethernet data link. Configured to be internet ready, the system is web accessible using an internet browser.

Multiple systems can be networked together in either linear or perimeter arrays for complete coverage of an area or border.

The system is also available in a 'stripped down' configuration that includes only the trailer assembly with equipment and storage boxes; mast; batteries; and solar panels. Call us if we can help tailor a unit to your specific need or application.



- US Army Environmental Qualification Test completed 05/06.
- Dovetail Mount for PTZ and Cameras. No tools required for setup.
- Removable Wireless Radio 'Stinger' Mast
- Alternate payloads possible. Call to discuss.
- Adjustable Pintle Hook for Various Vehicle Heights.



## FEATURES

- Trailer-Mounted Day/Night Surveillance System with Telescoping Mast. Less than 15 minutes setup.
- Several Day/Night Thermal Camera and Color CCD Sensor Packages available.
- Solar-Powered with Wireless Video Transmission and PTZ Control. Operator Control up to 15 km away.
- Can operate one week on battery power with no solar activity.
- Operator station can be configured in customer vehicle up to 6 km away, 15 km with optional antenna.

**Part Numbers:**

**Mobile Helios 320-75 System: MHL-320-75**  
**Mobile Helios 320-100 System: MHL-320-100**  
**Mobile Helios 640-75 System: MHL-640-75**  
**Mobile Helios 640-100 System: MHL-640-100**



Thermal Camera	Detector Type	Uncooled Thermal Imager operating in 7-14 micron spectrum
	Housing	Waterproof and dry-nitrogen pressurized housing. Includes Sun Shade.
	Power	12 VDC
	Detector & Lens	MHL-320-75: 320 x 240 pixels w/75 mm EF Lens MHL-320-100: 320 x 240 pixels w/100 mm EF Lens MHL-640-75: 640 x 480 pixels w/75mm EF Lens MHL-640-100: 640 x 480 pixels w/100mm EF Lens
Color CCD Camera	Image Device	1/4" type EXview HAD CCD, NTSC Signal
	Sync System	Internal / External (V-lock)
	Horizontal Resolution	Approx 480 Line (NTSC, High Resolution), Approx 320 Line (NTSC, Normal Resolution)
	Lens	36X Optical Zoom F = 3.4mm (wide) to 122.4mm (telescopic), F1.6 to F4.5
	Digital Zoom Ratio	12X Digital (Total Zoom Ratio: 432X)
	Minimum Illumination	1/60 s mode: 1.4 lux (typical) - F1.6, 50 IRE 1/4 s mode: 0.1 lux (typical) - F1.6, 50 IRE
	Video Output	VBS: 1.0 Vp-p (synch negative), Y/C
Pan/Tilt Assembly	Operating Temperature	0°C to 50°C
	Environmental	Weatherproof, aluminum housing, corrosion resistant
	Pan Rotation	360° continuous
	Load Capacity	30 lbs.
	Tilt Range	180° ±90°
Wireless TX/RX	Weight	13.1 lbs
	Type	5.8 GHz ISM Band, Wireless Encrypted Digital
	Power	12 VDC
	Output Power	15 dBm
Telescoping Mast	Range	Up to 6 km line-of-sight with built in antenna. Up to 15 km with optional antenna
	Height	Extended = 25', Nested = 5'3" (without cameras & pan/tilt)
	Sections	4 sections
	Wind load	2 sq. ft. sail are with windload at 65 mph (guy wires installed)
	Winch	40:1 worm drive winch
	Weight	Mast weighs 120 lbs. + 50 lb. payload = 170 lb. Total
Trailer	Type	Single Axle
	G.V.W.R.	3,400 lbs. (System weighs 2,450 lbs. with Std Configuration)
	Length	12' 6" ft.
	Tires	ST205/75-15. Other sizes optional
	Wheels	15", 5-bolt
Solar Panels	Lights	DOT Stop, Tail, Turn & Clearance
	Type	Photovoltaic with 36 enhanced-efficiency multicrystalline silicon cells
	Maximum Power	Two at 123 Watts each
	Current at Pmax	14.32 Amps (Total with two panels)
Batteries	Mechanical	2 panels - 59.02" x 26.06" x 1.81", Weight 30.86 lbs
	Deep Cycle	12 ea, 6 VDC, 213 AH
Operator Controls	Weight	31 kg (each)
	Lap Top Computer	IBM compatible (Windows based)

All specifications are subject to change without prior notice.

**Authorized Dealer**



**Mtech Imaging Pte Ltd**  
57 Changi North Crescent Singapore 499629  
Tel: +65 6572 5699 Fax: +65 6572 5680  
Website: <http://www.mtech-imaging.com>  
Email: [sales@mtech-imaging.com](mailto:sales@mtech-imaging.com)