# EVOLUTION® 6000 Thermal Imaging Cameras





WHEN YOU GO IN, WE GO IN WITH YOU.

# MSA protects firefighters' lives.

**MSA introduced** one of the first firefighting thermal imaging cameras over a decade ago. In the years following, we've refined TIC design through innovation and expertise, delivering several successful generations of market-leading TICs. We continue this commitment to the fire service by releasing the **EVOLUTION® 6000 TIC**, a new NFPA-compliant platform to make TIC use easier, faster, lighter, and more intuitive.

The EVOLUTION 6000 TIC offers many of the same benefits that firefighters have come to expect from MSA, as well as new ones to take user experience to another level. The new EVOLUTION 6000 TIC platform comprises three new models to offer the best mix of features, including NFPA 1801 compliance, to support the thermal imaging needs of all first responders.



New and enhanced features include best-in-class image quality, light weight, laser pointer and range finder, compass, integrated video and picture capture and integrated wireless video transmission system.

All EVOLUTION 6000 TIC models are built with high resolution 320x240 imaging cores. All cameras employ NFPA Basic startup mode to eliminate confusion when firefighters from different departments share tools.



**NFPA-compliant** third-party certification that builds upon MSA's long experience with thermal imaging

Nonincendive equipment (UL Class 1, Div 2) for additional safety within combustible environments

**Fireground-tough product design** provides waterproof shock resistance

**Camera Configuration Application** customize camera settings to meet your needs

**Patent-pending compass** assists in faster operations and improved situational awareness

**Three carabiner attachment points** offer firefighters flexibility of camera attachment

**Patented dual-handle design** for easy handoff and better ergonomics on the fireground



**Field-replaceable germanium lens** saves on repair costs

**Laser pointer** pinpoints hot spots to allow fast, specific action

**LED flashlight or patent-pending laser range finder options** enable faster, more precise action





**Six color palettes** for multiple views of thermal image

**2X/4X zoom** for a closer look at areas of interest

**Integrated video transmitter** sends video for remote monitoring and improved decision making

**Integrated picture/video capture** saves pictures and video for future review and training use

# **EVOLUTION® 6000 Thermal Imaging Cameras**

#### **EVOLUTION 6000 Basic TIC**

Provides easy to use TIC performance – a simplified fireground tool.

- Economical, durable value to fit your station's budget
- Save on repair costs with rugged, waterproof and shock-resistant product design
- 320X240 high definition image quality offers excellent resolution
- Standard flashlight provides extra visibility for firefighter proximity to enhance safety and situational awareness
- Laser pointer pinpoints hot spots and other areas of interest to allow others to take fast, specific action
- Patented dual-handle design, for easy handoff on the fireground
- Three carabiner attachment points offer flexibility in attaching camera to firefighter





Colorized basic image



Three carabiner attachment points



Patented dual-handle design



Field-replaceable germanium lens





Flashlight/laser pointer



#### **EVOLUTION 6000 Plus TIC**

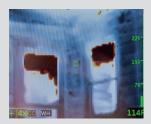
Adds additional tools to aid and improve fireground safety and decision making.

- 2X/4X zoom gets a closer look at areas of interest
- Six user-selectable color palettes provide flexibility to view thermal images
- Compass allows for faster rescues and improved situational awareness by displaying letters or icon for directional information
- Optional integrated video transmitter enables remote monitoring for improved decision making and situational awareness
- Optional integrated range finder offers more usable information to enable faster, more precise action from 16 to 210 feet (5 to 70 meters) away (replaces flashlight option)





Six color palettes



2X/4X zoom



Compass



Laser range finder

#### **EVOLUTION 6000 Xtreme TIC**

Provides same standard and optional features as EVOLUTION 6000 Plus TIC. Xtreme model ads:

- Integrated picture and video capture save action to camera's internal hard drive
- Download pictures and video to your desktop
- Use pictures and video for training, after-action review and documentation

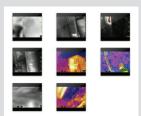




Camera Configuration Application



Video capture



Picture capture



#### **Applications**

#### Size up:

Ideal for locating the seat of any fire and for pinpointing and isolating hidden fires, as well as for location of heat accumulation areas and possible ventilation points.

Optional real time video broadcast directly from operations scene to incident command control assists firefighters in making strategic decisions and increasing fireground safety.





#### Search / rescue:

Search for victims and downed firefighters, locate missing/injured persons, search for suspects, or quickly scan areas for heat signatures using available six color palettes.

#### Operations:

Monitor building conditions to help avoid collapse, aid in decision-making process of placing firefighters on scene to find fire extensions.



#### Overhaul:

Search for remaining hot spots and areas of building instability. User-selectable color palettes support code inspections and maintenance.

### **Model Comparison**

	EVOLUTION 6000 TIC	EVOLUTION 6000 Plus TIC	EVOLUTION 6000 Xtreme TIC
HIGH DEFINITION 320X240 THERMAL IMAGING CORE	•	•	•
LASER POINTER	•	•	•
LED FLASHLIGHT*	•	•	•
THREE CARABINER ATTACHMENT POINTS	•	•	•
FIELD-REPLACEABLE GERMANIUM LENS	•	•	•
PATENTED DUAL-HANDLE DESIGN	•	•	•
SIX COLOR PALETTES		•	•
2X/4X ZOOM		•	•
COMPASS		•	•
OPTIONAL INTEGRATED VIDEO TRANSMITTER		•	•
OPTIONAL RANGE FINDER		•	•
INTEGRATED PICTURE CAPTURE			•
INTEGRATED VIDEO CAPTURE			•

<sup>\*</sup> Not available with range finder option



## **Technical Specifications**

CONSTRUCTION	Flame retardant (material passes NFPA direct flame exposure test). IP67 [withstands immersion to 3 ft (1 meter)]
APPROXIMATE DIMENSIONS	7.3» x 4.8» x 11.6» (LxWxH) (185 mm x 122 mm x 295 mm)
SENSOR	Uncooled VOX microbolometer
ARRAY SIZE	320X240
WEIGHT	2.65 lbs (1.2 kg)
POWER SOURCE	Rechargeable lithium-ion battery
OPERATING TIME	3.5 hours at nominal 72°F (22°C)
FIELD OF VIEW	48° H; 37° V
RANGE FINDER	Usable range 210 ft (70 m) Accuracy +/- 3 feet (1m) at 109 feet
INTRINSICALLY SAFE	Nonincendive equipment (UL Class 1, Div 2)

APPROVALS	Designed to meet NFPA 1801
NET EQUIVALENT	High Sensitivity 40 mK (0.040°C) (typical),
TEMPERATURE	78 mK (0.078°C) (max)
DIFFERENCE	Low Sensitivity 234 mK (0.234°C)
TEMPERATURE MEASUREMENT	$\pm$ 20 °C or $\pm$ 20 %, whichever is greater
IMAGE STORAGE	Number of images stored, 1000 minimum
(6000X ONLY)	Format – JPG
VIDEO STORAGE	Length – 4-hour minimum
(6000X ONLY)	Format – MPEG 4
ENVIRONMENTAL AMBIENT TEMPERATURE AND OPERATING TIME	176° F (80°C) > 30 minutes 248° F (120°C) > 20 minutes 500° F (260°C) > 6 minutes -22° F (-30°C) > 40 minutes -40° F (-40°C) > 25 minutes

#### **Ordering Information**

Model	Temperature units	Part number	With range finder option	With video transmitter option	With range finder and video transmitter options
EVOLUTION 6000 Basic TIC	Fahrenheit	10145938			
	Celsius	10145939			
EVOLUTION 6000 Plus TIC	Fahrenheit	10145940	10145951	10145952	10145953
	Celsius	10145954	10145955	10145956	10145957
EVOLUTION 6000 Xtreme TIC	Fahrenheit	10145958	10145959	10145960	10145961
	Celsius	10145962	10145963	10145964	10145965

EVOLUTION 6000 CHARGING KITS		
10145750	EVOLUTION 6000 TIC Station Kit (includes carrying case, 2 rechargeable batteries, multi-use charger (North America), retractable lanyard, and carabiner)	
10145771	EVOLUTION 6000 TIC Vehicle Kit (includes 2 rechargeable batteries, vehicle charger, retractable lanyard, and carabiner)	

VIDEO TRANSMISSION RECEIVING SYSTEMS		
	10119319	Deluxe Receiver Kit (frequency: 2458 / 2474 MHz)

 $For other frequencies, please \ contact \ your \ local \ MSA \ affiliate.$ 

ACCESSORIES	
10145859	Multi-use charger (12V) kit
10148136	Vehicle mounted charger system
10147390	Vehicle mounting bracket
10145749	Reflective label ID kit (includes 3 sets of reflective ID labels)
10120606-SP	Lithium-ion battery
10145748	Tripod adapter
10040005	Carabiner
10127441-SP	Plastic carrying case
10040226	Retractable lanyard
10039515	Shoulder strap
10039516	Wrist strap
10148391-SP	Protective display covers (3 per package)

Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice.

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