



# EVOLUTION® 6000 Thermal Imaging Cameras



Because every life has a purpose...

# 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 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 EVOLUTION 6000 TIC platform comprises three new models to offer the best mix of features, including NFPA 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.



NFPA 1801 compliant third-party certification 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

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



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

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EVOLUTION 6000+

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

**Camera configuration application** customizes camera settings to meet your needs 3

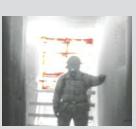
# EVOLUTION® 6000 Thermal Imaging Cameras

### **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-resistance product design
- 320X240 high definition image quality provides 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





Colourized basic image



Three carabiner attachments



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

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EVOLUTION 6000+

- 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 as to surroundings to enable faster, more precise action, from 5 to 70 meters (15 to 210 feet) away (replaces flashlight option)



Six color palettes



2x/4x zoom



Compass



Laser range finder

www.MSA**safety**.com

# **EVOLUTION 6000 Xtreme TIC**

Provides same standard and optional features as EVOLUTION 6000 Plus TIC.

- 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

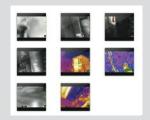


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Camera configuration application



Video capture



Picture capture



### **Applications**

#### Size up

Ideal for locating the seat of any fire and for pinpointing and isolating hidden fires, as well to locate areas of heat accumulation 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 condition 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 colour palettes support code inspections and maintenance.

### **Model Comparison**

|  | EVOLUTION 6000<br>Basic TIC | EVOLUTION 6000<br>Plus TIC | EVOLUTION 6000<br>Xtreme TIC |
|--|-----------------------------|----------------------------|------------------------------|
| HIGH DEFINITION 320X240 THERMAL IMAGING CORE | •                           | •                          | •                            |
| LASER POINTER                                | •                           | •                          | •                            |
| LED FLASHLIGHT *                             | •                           | •                          | •                            |
| THREE CARABINER ATTACHMENT POINTS            | ٠                           | ٠                          | •                            |
| FIELD-REPLACEABLE GERMANIUM LENS             | •                           | •                          | •                            |
| PATENTED DUAL-HANDLE DESIGN                  | •                           | •                          | •                            |
| SIX COLOR PALETTES                           |                             | •                          | •                            |
| 2X/4X ZOOM                                   |                             | ٠                          | •                            |
| COMPASS                                      |                             | •                          | •                            |
| OPTIONAL INTEGRATED VIDEO TRANSMITTER        |                             | •                          | •                            |
| OPTIONAL RANGE FINDER                        |                             | •                          | •                            |
| INTEGRATED PICTURE CAPTURE                   |                             |                            | •                            |
| INTEGRATED VIDEO CAPTURE                     |                             |                            | •                            |

\* Not available with range finder option



### **Technical Specifications**

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

| APPROVALS  | NFPA 1801 compliant  |
|--|--|
| NET EQUIVALENT<br>TEMPERATURE<br>DIFFERENCE              | High Sensitivity 40 mK (0.040°C) (typical),<br>78 mK (0.078°C) (max)<br>Low Sensitivity 234 mK (0.234°C)   |
| TEMPERATURE<br>MEASUREMENT                               | $\pm$ 10°C (18°F) or $\pm 10$ % whichever is greater   |
| IMAGE STORAGE<br>(6000X ONLY)                            | Number of images stored 1000 minimum<br>Format – JPG   |
| VIDEO STORAGE<br>(6000X ONLY)                            | Length – 4-hour minimum<br>Format – MPEG 4   |
| ENVIRONMENTAL<br>AMBIENT TEMPATURE<br>AND OPERATING TIME | 80°C (176°F) > 30 minutes<br>120°C (248°F) > 20 minutes<br>260°C (500°F) > 6 minutes<br>-30°C (-22°F) > 40 minutes<br>-40°C (-40°F) > 25 minutes |

### **Ordering Information**

| EVOLUTION 6000 TIC |  |
|--------------------|--|
| 10145939           | EVOLUTION 6000 Basic TIC, NFPA compliant (includes flashlight, laser pointer, degrees C)   |
| 10145955           | EVOLUTION 6000 Plus TIC, NFPA compliant<br>(includes laser range finder, meters, degrees C, zoom 2x/4x, colour<br>palettes, compass)                                 |
| 10145963           | EVOLUTION 6000 Xtreme TIC, NFPA compliant<br>(includes laser range finder, meters, degrees C, zoom 2x/4x, colour<br>palettes, compass, image capture, video capture) |

The EVOLUTION 6000 TIC is configurable to your needs by means of an Assembly To Order (ATO) code. We offer the above mentioned pre-configured TIC's. If you need any other configurations, please contact your local MSA affiliate.

# EVOLUTION 6000 Charging KITS 10147389 EVOLUTION 6000 TIC Station Kit (includes carrying case, 2 rechargeable batteries, desktop / vehicle dual charger, retractable lanyard, carabiner) 10145771 EVOLUTION 6000 TIC Vehicle Kit (Includes 2 rechargeable batteries, vehicle charger, retractable

lanyard, carabiner)

| ACCESSORIES |                                |
|-------------|--------------------------------|
| 10145859    | Multi-use charger (12V) kit    |
| 10148136    | Vehicle mounted charger system |
| 10147390    | Vehicle mounting bracket       |
| 10145749    | Reflective label ID kit        |
| 10120606-SP | Lithium-ion battery            |
| 10145748    | Tripod adapter                 |
| 10040005    | Carabiner                      |
| 10127441-SP | Plastic carrying case          |
| 10040226    | Retractable lanyard            |
| 10039515    | Shoulder strap                 |
| 10039516    | Wrist strap                    |
| 10147892    | Sun shroud                     |
| 10148391-SP | Disposable display covers      |

For video transmission and receiver kits, please contact your local MSA affiliate.

#### Your direct contact

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