

# **TEMPEST Tic 4.3X NFPA**

High Resolution Thermal imaging camera



# Efficient and versatile = 3 buttons + 4" display

Particularly suitable for the First attack. LEADER TIC 4.3X offers unbeatable value and best quality, combined with all important features: ideal for firefighting, first attack, search for missing persons and



### **Outstanding features:**

- Compact 7.09 x 6.02 x 4.13 inches
- Lightweight 2.25 lbs with 2 batteries.
- Large 4" display for detailed visibility
- Widest detection range: -40°F to +2100°F
- Video recording, picture capture and image freeze
- Batteries: 6 year warranty, 5000 charging cycles
- Safe batteries (LiFePO4): for high temp operations
- Up to 8h running time (2 batteries) with integrated Eco-Boost-System
- Germanium window to protect the optics
- Removable Pistol grip option
- Boot time: less than 5 sec
- 3 Large buttons: easy to operate even with gloves









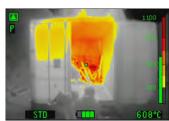
NFPA 1801:2018

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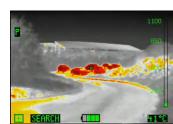


#### Color schemes:

Tempest TIC 4.3X offers 3 color schemes as standard: Fire, Search, and Inverse +2 color schemes as option: Cold Finder and Multicolor



STD / FIRE: Dark Red >1560°F Red > 1250°F Orange > 930°F Dark Yellow >660°F Yellow > 400°F White = Hot Black = Cold



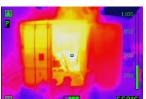
SEARCH: 2 hottest % colored in Red and the 5 following hottest % in Yellow-Orange.



COLD Finder: Blue color for coldest areas



**INVERSE:** Same as Fire scheme but White & Black are inversed: White = Cold Black = Hot



**MULTICOLOR:** For Industrial applications

#### 3 Sensitivity modes with automatic switch according observed scene:

-High sensitivity temperature range: -40 +300°F

-Medium sensitivity temperature range: -40 + 950°F

-Low sensitivity temperature range: -40 +2100°F





#### **Characteristics:**

| Leader TIC 4.3X with Eco-Boost-System |   |  |  |  |  |
|---------------------------------------|---|--|--|--|--|
| Dimensions                            | L7.09 x W6.02 x H4.13 inches<br>(H = +4.33" with optional pistol grip)            |  |  |  |  |
| Weight                                | 2.25 lbs with 2 batt / 2.06 lbs with 1 batt (+0.37 lbs with optional pistol grip) |  |  |  |  |
| Display                               | 4" LCD / 320 x 240 (76.800) px /<br>Backlighted / Brightness: 800 cd/m²           |  |  |  |  |
| Frequency                             | 60Hz Fps  |  |  |  |  |
| T°C Range                             | -40° to +2100°F   |  |  |  |  |
| Colorization                          | Std: Fire, Search, Inverse<br>Option: Cold finder and Multicolor                  |  |  |  |  |
|                                       | Housing   |  |  |  |  |
| Material                              | PUR / Elastomer housing with silicone boot around display                         |  |  |  |  |
| Drop Test                             | 6.5ft on concrete   |  |  |  |  |
| IP                                    | IP67 / 3.2ft Meter 30 Minutes   |  |  |  |  |
| Heat resistance                       | 300°F for 15min / 500°F for 5min  |  |  |  |  |
|                                       | Sensor  |  |  |  |  |
| Micro bolometer<br>type               | Uncooled 17µ Amorphous Silicon aSi<br>Resolution <b>384 x 288</b> (110 592 px)    |  |  |  |  |
| Spectral range                        | 7 – 14 μm   |  |  |  |  |
| Thermal sensitivit                    | y NETD: <50mK (<0.05°C)   |  |  |  |  |
|                                       | Optic   |  |  |  |  |
| Material                              | Germanium Carbon Coated Protected by a germanium window                           |  |  |  |  |
| Focus                                 | 1.15ft to infinity / F/1.3 speed  |  |  |  |  |
| Visual field / FOV                    | H: 51° / V: 40° / Diagonal: 65°   |  |  |  |  |

| General   |   |  |  |  |  |
|---|---|--|--|--|--|
| Rechargeable batteries  | LiFePO <sub>4</sub> (Lithium Iron Phosphate = safety VS fire), 2.5Ah at 6.6V, 0.19lbs   |  |  |  |  |
| Running time<br>(20°C)<br>with Eco-Boost-<br>System since<br>October 2018 | Without video/photo functions:  >8h (2 batt) / >4h (1 batt)  With video/photo functions:  >6h (2 batt) with non-active video  >5h (2 batt) with recording video |  |  |  |  |
| Boot time   | < 5 seconds   |  |  |  |  |
| Charging voltage  | 12-24 VDC or 100-240 VAC  |  |  |  |  |
| Charging time<br>(for 2 batt / half for<br>1 batt)                        | Charging bay: ~1h30<br>Mains charger: 100% in ~2h,<br>90% in ~1h30, 80% in ~1h20  |  |  |  |  |
| Charging cycles   | > 5000  |  |  |  |  |
| Memory (optional)   | 8GB internal SD card<br>(8h video or 1000 pics)   |  |  |  |  |
| Warranty  | 5 years on camera_/ 6 years on<br>batteries / 10 years on thermal sensor<br>/ 1 year on accessories (chargers,<br>charging bay, etc)                            |  |  |  |  |
| Certifications  | NFPA1801:2018 and ISA12.12.01 / CSA C22.2 N°213 and CE  |  |  |  |  |
|   | Options   |  |  |  |  |
| Removable pistol gri  | Picture capture and/or video recording (8GB capacity)   |  |  |  |  |
| Neck strap in flame retardant material                                    | Vehicle charging bay or mains charger   |  |  |  |  |
| 1 or 2 Retractable lanyards   | Carrying case IP67  |  |  |  |  |
| Protection hood   | Wireless video transmission to computer, tablet or smartphone   |  |  |  |  |



#### **Energy concept**

LiFePO4 batteries (lithium-iron-phosphate). **Benefits:** 

- -Very long lifespan guaranteed 5000 charging cycles ( $\sim$ 10 years)
- -Operating time (8h with 2 batteries at the same time in the camera

#### Picture capture & Video recording

Pictures (up to 1000) and Video (up to 8h) can be:





- viewed on the camera screen during operation

- Live Pictures can be sent to a computer, tablet or smartphone thanks to optional wireless stick.

- Downloaded into a computer via a USB cable



#### **Vehicle Charging Bay**

Very space-saving mountable! Power supply 12/24 VDC or 100-240 VAC. Can charge up to 4 batteries at the same time (2 in the camera and 2 spares)





#### Camera standard features:

|                       | Color modes         |                            | Features              |           |                         |   |                         |                    |       |              |              |
|-----------------------|---------------------|----------------------------|-----------------------|-----------|-------------------------|---|-------------------------|--------------------|-------|--------------|--------------|
| Description           | Color<br>modes      | Optional<br>color<br>modes | Max<br>color<br>modes | Battery   | Freeze<br>mode          | Side<br>trap                                | Video<br>recor-<br>ding | Picture<br>capture | Laser | Zoom         | USB<br>cable |
| LEADER TIC<br>4.3X    |                     |                            | 5                     | 2         | V                       | No, but<br>available                        |                         |                    |       | $\checkmark$ |              |
| LEADER TIC<br>4.3X L  | Fire<br>&<br>Search | & Multicolor or Cold       | 5                     | 2         | $\checkmark$            | attach-<br>ment<br>points<br>for<br>zippers |                         |                    | V     | $\checkmark$ |              |
| LEADER TIC<br>4.3X V  | & Inverse           | 5                          | 2                     | $\sqrt{}$ | and/or<br>neck<br>strap | ~   | V                       |                    | ~     | $\checkmark$ |              |
| LEADER TIC<br>4.3X VL |                     |                            | 5                     | 2         | V                       |   | V                       | V                  | V     | V            | <b>√</b>     |

V= Video + Picture

L = Laser

## Camera optional accessories:

|      | Wireless<br>Transmission<br>kit<br>(to come) | Only compatible with cameras equipped with Video recording |
|------|--|--|
|      | Pack of 2<br>spare<br>batteries              |  |
| Ci . | Cable<br>charger                             | Available in 12/24V<br>or 100V-240V                        |
|      | Watertight<br>Carrying<br>case               | IP67   |
| use  | Vehicle<br>charging bay                      | Charge batteries inside the camera                         |

|           | Vehicle<br>charging bay<br>with<br>additional<br>slots | Charge batteries in<br>the camera + 2 extra<br>spare batteries |
|-----------|--|--|
|           | Power supply<br>for charging<br>bay                    | Exist in 12/24V and<br>100V-240V with US or<br>EU plug         |
|           | Retractable<br>lanyard                                 | 1.1 lbs or 2.2 lbs<br>tension force                            |
| <b>(9</b> | Neck strap   | Fire-proof (Kevlar)  |
|           | Protection<br>hood<br>(to come)                        | Increases exposure time x2 to high temperatures                |





