

# LEADER TIC 4.3



## High Resolution Thermal imaging camera

## **Efficient and versatile = 3 buttons + 4" display**

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



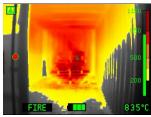
#### **Outstanding features:**

- Compact 175 x 145 x 97 mm
- Lightweight 990gr with 2 batteries and side straps.
- Large 4" display for detailed visibility
- Widest detection range: -40°C to +1150°C
- Video recording, picture capture and image freeze
- Batteries: 6 year warranty, 5000 charging cycles
- Safe batteries (LiFePO4): for high temp operations
- With ECO BOOST System for extended running time
- Up to 8h running time (2 batt.) with Eco-Boost-System
- Removable Pistol grip option
- Boot time: less than 5 sec
- 3 Large buttons: easy to operate even with gloves
- Also available in 9hz = non dual use good
- Functions:
  - ON/OFF
  - o Zoom x2 x4
  - Colorization selection (3 or 5 modes)
  - Image freeze / picture capture (option)
  - Video recording (option)
  - Replay picture and video on screen
  - Laser pointer (option)



## **Colour schemes:**

LEADER TIC 4.3 offers **3 colour schemes** as standard: **Fire, Search, and Inverse +2 colour schemes** as option: **Cold Finder and Multicolour** 



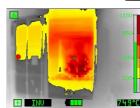
FIRE:
Dark Red >850°C
Red > 675°C
Orange > 500°C
Dark Yellow >350°C
Yellow > 200°C
White = Hot
Black = cold



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



COLD Finder: Blue colour for coldest areas



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



**MULTICOLOUR:** For Industrial applications

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

-High sensitivity temperature range: -40 +150°C -Medium sensitivity temperature range: -40 + 500°C

-Medium sensitivity temperature range: -40 + 500°C -Low sensitivity temperature range: -40 +1150°C



#### **Characteristics:**

Leader TIC 4.3 with Eco-Boost-System				
Dimensions	L.175 x W.145 x H.97 mm (H = +110mm with optional pistol grip)			
Weight	990g with 2 batt / 905g with 1 batt (+170g with optional pistol grip)			
Display	4" LCD / 320 x 240 (76.800) px / Backlighted / Brightness: 800 cd/m²			
Frequency	60Hz Fps = Dual Use Good 9Hz = Non Dual Use Good			
T°C Range	-40° to +1150°C			
Colorization	Std: Fire, Search, Inverse Option: Cold finder and Multicolour			
Housing				
Material	PUR / Elastomer			
Drop Test	2m on concrete			
IP	IP67 / 1 Meter 30 Minutes			
Heat resistance	150°C for 15min / 260°C for 5min			
	Sensor			
Micro bolometer type	Uncooled 17µ Amorphous Silicon aSi Resolution <b>384 x 288</b> (110 592 px)			
Spectral range	7 – 14 μm			
Thermal sensitivity	NETD: <50mK (<0.05°C)			
	Optic			
Material	Germanium Carbon Coated Protected by a germanium window			
Focus	0,35m to infinity / F/1.3 speed			
Visual field / FOV	H: 51° / V: 40° / Diagonal: 65°			

Rechargeable batteries	LiFePO <sub>4</sub> (Lithium Iron Phosphate = safety VS fire), 2.5Ah at 6.6V, 85g
Running time (20°C) with Eco-Boost-System since 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 (for 2 batt. / consider half for 1 batt.)	Charging bay: ~2h Mains charger: 100% in ~2h, 90% in ~1h30, 80% in ~1h20
Charging cycles	> 5000
Memory (optional)	8GB internal SD card (8h video or 1000 pics)
Warranty	5 years on camera / 6 years on batteries / 10 years on thermal sensor / 1 year on accessories (chargers, charging bay, etc)
	Options
Removable pistol grip	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
High-Gain Mode	1150

General



#### **Energy concept**

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

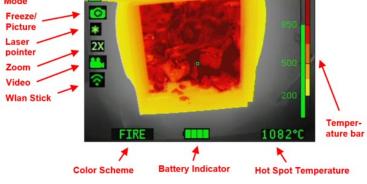
- -Very long lifespan guaranteed 5000 charging cycles (~10 years)
- -Operating time (8h with 2 batteries at the same time in the camera

#### 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:

	Colour modes		Features								
Description	Color modes	Optional color modes	Max color modes	Battery	Freeze mode	Side trap	Video recording	Picture capture	Laser	Zoom	USB cable
LEADER TIC 4.3		& Cold	5	2	V	2				V	
LEADER TIC 4.3 L	& Search		5	2	<b>V</b>	2			V	V	
LEADER TIC 4.3 V	& Inverse		5	2	V	2	V	V		<b>V</b>	V
LEADER TIC 4.3 VL		5	2	V	2	V	V	V	V	V	

V= Video + Picture

L = Laser

## **Camera optional accessories:**

	Wireless Transmission kit	Only compatible with cameras equipped with Video recording
Harmon Carlo	Pack of 2 spare batteries	
U	Cable charger for TIC 3 & 4	Available in 12/24V or 100V-240V
unes.	Watertight Carrying case	IP67
and a	Vehicle charging bay	Charge batteries inside the camera
*	Laserpointer	Only for 3.3 and 4.3 models

Vehicle charging bay with additional slots	Charge batteries in the camera + 2 extra spare batteries
Power supply for charging bay	Exist in 12/24V and 100V-240V with US or EU plug
Retractable lanyard	500gr or 1000gr tension force
Neck strap	Fire-proof (Kevlar)
Protection hood	Increases exposure time x2 to high temperatures
Removable pistol grip	Pistol grip = 170g Incl. mounting tool

## Frequency = Image motion fluidity

Frame Per Second (Hz) of camera can be chosen:

- 60Hz camera has great fluidity but requires a dual use license for outside EU.
- 9Hz camera has lower fluidity but doesn't request any exportation license.



