



LEADER TIC 3.3X NFFPA

High Resolution Thermal imaging camera **ECO-BOOST-SYSTEM**

Efficient and versatile = 3 buttons + 3.5" display

Particularly suitable for the First attack. LEADER TIC 3.3X 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 170 x 148 x 93 mm
- Lightweight 920g with 2 batteries and side straps.
- Large 3,5" display for details visibility
- Widest detection range: -40°C to +1150°C
- Video recording, picture capture and image freeze
- Batteries: 6 year warranty, 5000 charging cycle
- 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
- Functions:
 - ON/OFF
 - 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)

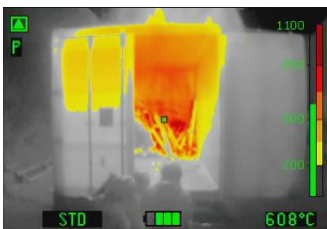


NFFPA 1801:2018

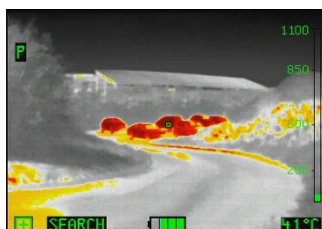


Color schemes:

LEADER TIC 3.3X offers 3 color schemes as standard: Fire, Search, and Inverse
+2 color schemes as option: Cold Finder and Multicolor



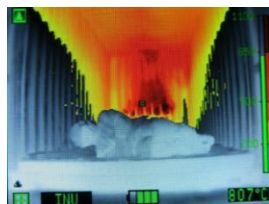
STD / FIRE:
 Dark Red >850°C
 Red > 675°C
 Orange > 500°C
 Dark Yellow >350°C
 Yellow > 200°C
 White = Hot
 Black = Cold



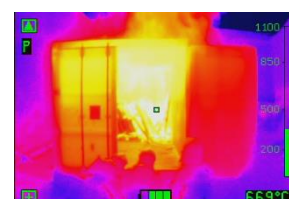
SEARCH:
 2 hottest % colored in Red and the 5 following hottest % in Yellow-Orange.



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 +150°C
- Medium sensitivity temperature range: -40 + 500°C
- Low sensitivity temperature range: -40 +1150°C

As part of our policy of constantly researching to improve our equipment, we reserve the right to change the characteristics of our apparatus at any time without prior notice.
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Characteristics:

Leader TIC 3.3X with Eco-Boost-System	
Dimensions (approx.)	L.170 x W.148 x H.93 mm (H= +110mm with optional pistol grip)
Weight	920g with 2 batt / 835g with 1 batt (+170g with optional pistol grip)
Display	3,5" LCD / 320 x 240 (76 800) px / Backlighting / Brightness: 800 cd/m ²
Frequency	60Hz Fps
T°C Range	-40° to +1150°C
Colorization	Std: Fire, Search, Inverse Option: Cold Finder and Multicolour
Housing	
Material	PUR / Elastomer housing with silicon boot around display
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 384 x 288 (110 592 px)
Spectral range	7 – 14 µm
T°C sensitivity	NETD: <50mK (<0.05°C)
Optics	
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°

General	
Rechargeable batteries	LiFePO ₄ (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: ~1h30 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...)
Certifications	NFPA 1801:2018 (under process) and CE
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



Energy concept

LiFePO₄ batteries (lithium-iron-phosphate).

Benefits:

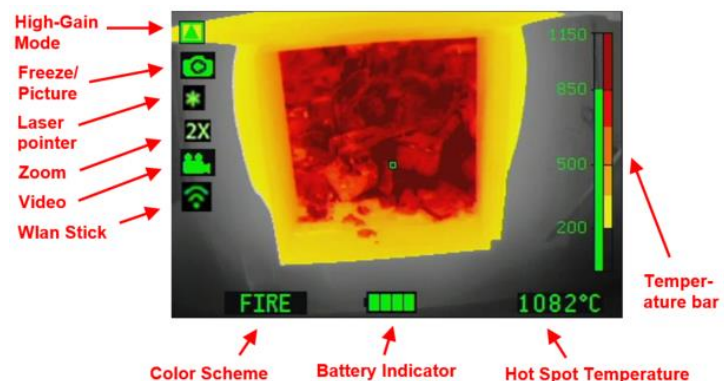
- Very long lifespan guaranteed 5000 charging cycles (~10 years)
- Operating time (up to 8h with 2 batteries at the same time in the camera)

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



Wlan module



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)



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Camera standard features:

Description	Color modes			Features							
	Color modes	Optional color modes	Max color modes	Battery	Freeze mode	Side trap	Video recording	Picture capture	Laser	Zoom	USB cable
LEADER TIC 3.3X	Fire & Search & Inverse	Multicolor or Cold	5	2	√	No, but available attachment points for zippers and/or neck strap				√	
LEADER TIC 3.3X L			5	2	√				√	√	
LEADER TIC 3.3X V			5	2	√		√	√		√	√
LEADER TIC 3.3X VL			5	2	√		√	√	√	√	√

V= Video + Picture
L = Laser

Camera optional accessories:

	Wireless Transmission kit (to come)	Only compatible with cameras equipped with Video recording		Vehicle charging bay with additional slots	Charge batteries in the camera + 2 extra spare batteries
	Pack of 2 spare batteries			Power supply for charging bay	Exist in 12/24V or 1 100V-2400V with US or EU plug
	Cable charger	Available in 12/24V or 100V-240V		Retractable lanyard	500gr or 1000gr tension force
	Watertight Carrying case	IP67		Neck strap	Fire-proof (Kevlar)
	Vehicle charging bay	Charge batteries inside the camera		Protection hood (to come)	Increases exposure time x2 to high temperatures
	Laser pointer	Only for 3.3 and 4.3 models		Removable pistol grip	Pistol grip = 170g Incl. mounting tool



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