

# TEMPEST™ TIC 3.1 LR & TIC 4.1 LR

## LONG RANGE high resolution Thermal Imaging Camera

- LR700 (2296ft vision) or LR1000 (3281ft vision)
- 1 button camera for ease and efficiency
- 3.5" or 4" display

Particularly suitable for Search & Rescue operations in large open fields such as sea, mountain, country side, desert...

They offer unbeatable value and best quality, ideal for rescue teams who search for missing persons.



### + Outstanding features:

- Compact & Lightweight
- Large 3.5" or 4" display for detailed visibility
- 2 long range versions: see a human target at 2296ft away, or 3281ft.
- Housing available in 2 colors: Red and Dark grey
- Wide detection range: -40°F to +2100°F
- 1 colorization mode
- Picture Capture and / or Video recording (option)
- Batteries: 6 year warranty, 5000 charging cycles
- Safe batteries (LiFePO4): No explosion at high temperature operations
- Up to 8h running time (2 batteries) with Eco-Boost-System
- Germanium window to protect the optics
- 1 Large button: easy to operate even with gloves
- Functions:
  - o ON/OFF
  - o Image freeze & picture capture (option)
  - o Continuous video recording (option)
- Removable Pistol grip (option)
- Wireless transmission kit (option)



### Color schemes:

TEMPEST TIC 3.1 and 4.1 offer one color scheme: Fire (standard) or optional Search (instead of Freeze)



**FIRE (STD):**  
Dark Red >1562°F  
Red > 1247°F  
Orange > 932°F  
Dark Yellow >662°F  
Yellow > 392°F  
White = Hot  
Black = cold



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

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

- High sensitivity temperature range: -40 +302°F
- Medium sensitivity temperature range: -40 + 932°F
- Low sensitivity temperature range: -40 +2100°F

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### Energy concept

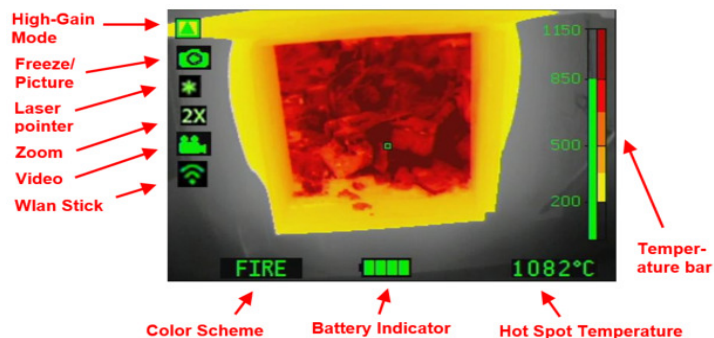
LiFePO4 batteries (lithium-iron-phosphate).

#### 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 streaming can be sent to a computer, tablet or smartphone thanks to optional wireless stick.
  - Downloaded onto 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)

### Technical characteristics:

	Tempest TIC 3.1 LR700 or LR1000	Tempest TIC 4.1 LR700 or LR1000
<b>Thermal Imaging Camera</b>		
NFPA 1801-2018 certified	No	No
Dimensions	L.6.49 x W.5.51 x H.3.34 in (H= +4.33in with optional pistol grip)	L.6.89 x W.5.71 x H.3.82 in (H= +4.33in with optional pistol grip)
Weight	1.92lb with 2 batt / 1.73lb with 1 batt (+.37lb with optional pistol grip)	2.09lb with 2 batt / 1.91lb with 1 batt (+.37lb with optional pistol grip)
Operating button(s)	1 large button glove-friendly easy to operate	
Battery compartments	x2 available. Camera uses 1 or 2 batteries to work.	
Power-on indicator	Company logo lighted up when powered ON	
<b>Display</b>		
Size	3,5" LCD / 320 x 240 (76 800) px	4" LCD / 320 x 240 (76 800) px
Backlight / Brightness	800 cd/m <sup>2</sup>	
Protective display	Polycarbonate cenolex-sapphire ultra resistant material. Interchangeable by user	
Colorization modes	Standard: Fire, or Option: Search	
<b>Housing</b>		
Material	PUR / Elastomer	
Drop Test	2m onto concrete on 6 faces and edges	
IP	IP67 / 1 Meter 30 Minutes	
Heat resistance	302°F for 15min / 260°C for 5min	
<b>Sensor</b>		
Micro bolometer type	Uncooled 17μ Amorphous Silicon aSi	
Sensor resolution	384 x 288 (110 592 px)	
Spectral range	7 – 14 μm	
Sensor sensitivity	NETD: <50mK (<0.05°C)	
Frequency	60Hz Fps	
Temperature range	-40° to +2100°F	
<b>Optics</b>		
Material	Germanium Carbon Coated	
Lens	24 mm for Leader TIC LR700 35 mm for Leader TIC LR1000	
Focus	10m to infinity / F/1.2 speed for Leader TIC LR700 5m to infinity / F/1.5 speed for Leader TIC LR1000	
Visual field / FOV	H: 13° / V: 9.8° / Diagonal: 16.3° for Leader TIC LR700 H: 9.4° / V: 7° / Diagonal: 11.7° for Leader TIC LR1000	
Protection	Protected by a Germanium window against exterior aggressions	

Rechargeable batteries	
Type	LiFePO4 (Lithium Iron Phosphate) / 2.5Ah at 6.6V / 85g
Safety	Does not explode when exposed to high temperature.
Running time (68°F) 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
Charging voltage	12-24 VDC or 100-240 VAC
Charging time for 2 batteries (half for 1 batt.)	Mains charger & Charging bay: 100% in ~2h, 90% in ~1h30, 80% in ~1h20
Charging temperature	32°F to 113°F ambient temperature
Charging cycles	More than 5000 cycles
Miscellaneous	
Start-up time	Less than 5 seconds
Memory (optional)	8GB internal SD card (8h video or 1000 pics)
Operating temperatures	-4°F to +140°F. +302°F: 15 min. +302°F: 30 min with optional protection hood. +500°F: 5 min. +500°F: 10 min with optional protection hood.
Storage temperatures	-22°F to 158°F
Warranties	
Camera	5 years
Batteries	6 years
Thermal sensor	10 years
Accessories	1 year (chargers, charging bay, etc...)

Mains charger (optional)	
Powering	12-24 VDC or 100-240 VAC
Components	Power supply + Connecting system on cable
References:	
Charger 12-24V + cable Cig. plug	A10.00.028
Charger 100-240V EU plug	A10.00.025
Charger 100-240V US plug	A10.00.034
Charger 100-240V UK plug	A10.00.025UK
Charger 100-240V AUS plug	A10.00.025AUS

Charging bay (optional)	
Powering	12-24 VDC or 100-240 VAC
Components needed	Bay + Power supply + Cable
References:	
Bay alone (without power supply)	A10.00.022
Bay with additional 2 slots (without power supply)	A10.00.021
Power supply 12-24V + cable Cig. plug	A10.00.023
Power supply 100-240V + cable EU plug	A10.00.026
Power supply 100-240V + cable Swiss plug	A10.00.351
Power supply 100-240V + cable US plug	A10.00.352
Power supply 100-240V + cable UK plug	A10.00.026UK
Power supply 100-240V + cable AUS plug	A10.00.026AUS

References of optional accessories	
Additional battery x1	A10.00.044
Additional batteries x2	A10.00.016
Removable pistol grip	A10.00.306
Neck strap (Nomex material)	A10.00.024
Retractable lanyards 1000g tension	A10.00.017
Retractable lanyards 500g tension	A10.00.017L
Carrying IP67 hard case	A10.00.048
Protection hood 3.1 (double heat exposure time)	A10.00.303
Protection hood 4.1 (double heat exposure time)	A10.00.403
Wireless video transmission kit	A10.00.308
Analogue output (NTSC or PAL)	TBC

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