



REAP-IR®-50



The REAP-IR®-50 series thermal riflescope was developed to be used primarily as a rifle-mounted platform. The REAP-IR®-50 thermal riflescope comes in two configurations, one equipped with a Laser Range Finder and one without. Featuring an all new proprietary Trijicon Thermal Core and operating system, the REAP-IR® provides outstanding image quality, user configurable controls, wireless connectivity, ballistic solver, onboard recording, and much more.

See More. Detect Faster.

Advanced thermal imaging and display technology deliver sharper detail and improved target recognition.

Instant Access to Critical Functions

User-configurable controls and an ambidextrous keypad keep essential features within reach.

Record, Review, Share.

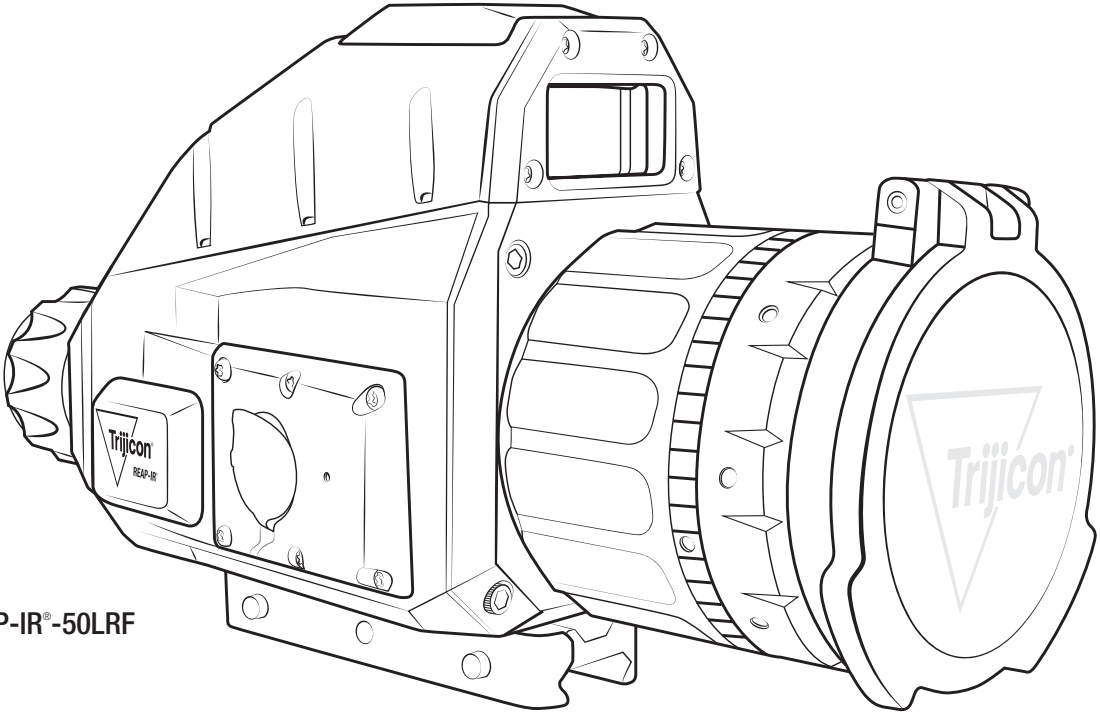
Integrated video and image capture with fast wireless and USB-C file transfer capabilities.

Unmatched Durability

Designed, constructed and tested to MIL-STD-810H and made in the USA

Advanced Technology

- **Connect Wirelessly to Mobile Devices**
- **GPS Capability**
- **Video Streaming**
- **Compass**
- **Microphone**
- **Roll Indicator**
- **Pitch Indicator**
- **Laser Range Finder** with Corrected Ballistic Reticle (*REAP-IR®-50LRF Models*)
- **Stadiametric Ranging Capability** (*REAP-IR®-50 Models*)
- **Onboard Video/Photo Capture** with Automatic Video Capture capabilities
- **USB-C Port**
Connect to external power (in addition to media download/software updates)



Trijicon REAP-IR®-50LRF

Proprietary Trijicon® Thermal Core

Combining high-resolution thermal imaging, advanced ranging capabilities, intuitive controls, and rugged MIL-STD-810H-tested construction, the Trijicon® Thermal Core is engineered to deliver exceptional image clarity into a durable, field-ready platform and designed to help users identify, range, and engage targets with speed and confidence.



Enhanced Thermal Image Quality

The 1024×768 thermal sensor and manual-focus 50mm F1 lens delivers sharper thermal definition and image clarity across a wide range of distances. A 1280×1024 SXGA OLED display with multiple color palettes helps optimize visibility in changing conditions.

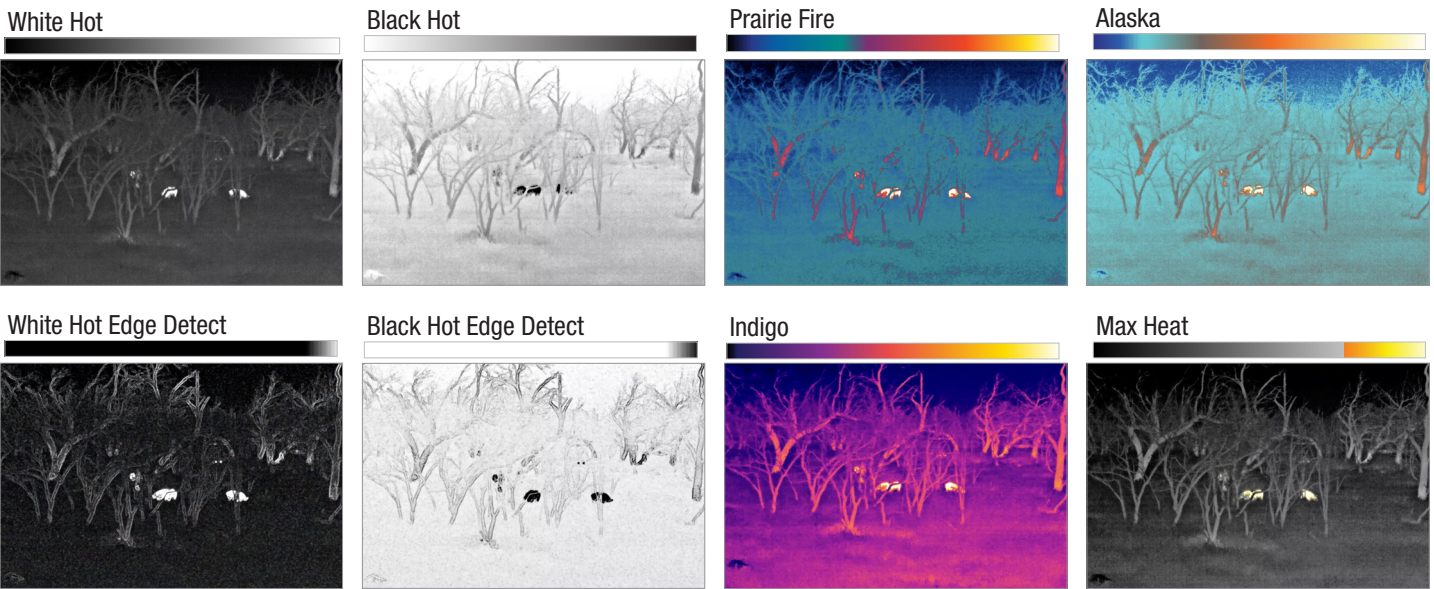
REAP-IR®-50 Thermal Image



Intelligent Thermal Viewing Modes

Eight thermal palettes in monochrome, color, and a hybrid setting (Max Heat) allow users to optimize image contrast and target visibility for changing environments and conditions. The innovative Edge Detect modes highlight terrain, foliage, and man-made structures with subtle gray outlines while keeping hot targets bright and distinct, improving environmental awareness and reducing eye fatigue during extended nighttime use.

Trijicon® Electro Optics Thermal Color Palettes



Enhanced Target Recognition (ETR)

ETR improves target visibility in high-contrast environments by optimizing thermal contrast where it matters most. When bright backgrounds like open sky reduce target definition, ETR reallocates dynamic range to enhance detail and prevent washout in the primary viewing area.



Range, Calculate, Engage



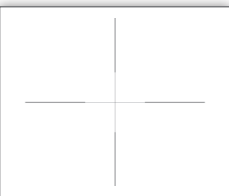
The REAP-IR®-50LRF Model features a built-in 905nm laser rangefinder, providing rapid target distance measurements while the onboard ballistic calculator generates an on-screen hold reference based on the active shooter profile.



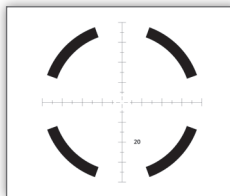
The REAP-IR®-50 Model has a stadiametric ranging mode that allows users to estimate distance by bracketing known target sizes within the display. Reference animals include a deer, hog, and hare.

Customizable Reticle System

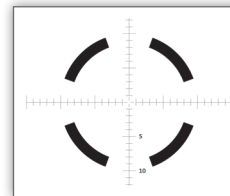
Adapt your optic to the mission with eight selectable reticle patterns and eight color choices designed for improved clarity, speed, and usability across multiple shooting applications. User-selectable reticle choices include Standard Crosshair, MOA Crosshair, MRAD Crosshair, .223 BDC, .308 BDC, 300BLK BDC, 7.62x39 BDC, and Circle Dot reticles with multiple reticle color options.



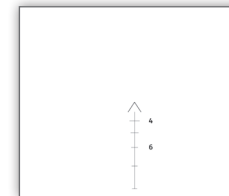
Std Crosshair



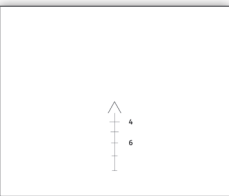
MOA



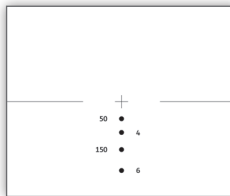
MRAD



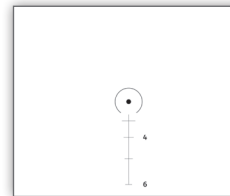
.223 BDC



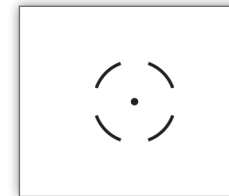
.308 BDC



300BLK BDC



7.62x39 BDC



CIRCLE DOT

Reticle Color Choices

- Black
- White
- Red
- Green
- Blue
- Yellow
- Cyan
- Magenta

Accurate at Every Zoom Level

The integrated first focal plane reticle remains proportionally correct through every level of the 8x digital zoom, keeping holdovers and ranging references consistent for accurate engagements at varying distances.



Faster Access. Better Control.



Large tactile buttons and an ambidextrous center-mounted layout make operation easy in darkness, with gloves, or under stress. Customizable “Quick Keys” provide one-touch access to commonly used features without navigating the menu system.

Unmatched Durability and Reliability

Built to Endure Extreme Conditions
Designed and tested to MIL-STD-810H standards for reliable performance through shock, vibration, temperature extremes, and harsh environments.



American-Made Confidence
Designed, engineered, machined, and assembled in the United States with uncompromising quality control and craftsmanship using premium materials, precision manufacturing, and battle-proven design principles.

About the Science of Brilliant®

At Trijicon®, we are bound by a commitment to industry-leading research, design, and testing to seek innovative aiming solutions that constantly redefine “brilliant.” That’s why every Trijicon® riflescope design is tested to the procedures below.



Alaska-to-Africa Temperature Tested
To ensure each family of riflescopes is ready for whatever our users put them through, we perform an “Alaska-to-Africa” temperature shock test with temps from -20°F to 140°F.



Immersion Tested
All models are immersion tested, and every riflescope is dry-nitrogen filled to eliminate internal fogging.



Solid Zero Tested
Our riflescopes are designed to hold their zero giving you the precision you need. Every model is subjected to 5,000 consecutive rounds, confirming no reticle shift has occurred.



Shock & Vibration Tested
All riflescope models are tested to withstand recoil and vibrational stresses without malfunction, so it can take a beating before, during, and after use.



Drop Tested
Because we don’t believe every drop should be followed by a warranty claim, we drop test each riflescope design to check for durability.

To learn more about The Science of Brilliant® and Trijicon® products, visit [Trijicon.com/Science](https://www.trijicon.com/Science).

Specifications



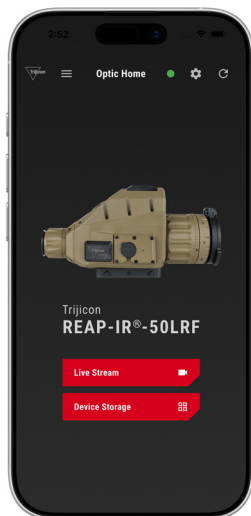
	REAP-IR® -50	REAP-IR® -50LRF
Laser Range Finder	n/a	905nm – 50m - 1500m
Weight (w/Mount & Cap, w/o Batteries & Eyecup)	51.4 oz (3.2 lbs)	54.9 oz (3.4 lbs)
Dimensions (LxWxH) (without Lens Cap & Eyecup, includes mount)	8.93 in. x 3.39 in. x 4.23 in. (226.8mm x 86.1mm x 107.4mm)	8.93 in. x 3.39 in. x 4.95 in. (226.8mm x 86.1mm x 125.7mm)

Both Models

Sensor Resolution	1024 x 768 (XGA)	Eye Relief/Exit Pupil	25mm / 10mm
Pixel Pitch	12 µm	Diopter	+2 / -4
Sensor Type	Uncooled Vanadium Oxide	Optical Magnification	1.5x
Refresh Rate	50 hz	Digital Zoom	1-8x
Display	1280 x 1024 SXGA Color OLED	Combined Magnification	1.5x – 12.0x
Display Palettes	Monochrome: White Hot, White Hot Edge Detect, Black Hot, and Black Hot Edge Detect Color: Indigo, Prairie Fire, and Alaska Hybrid: Max Heat	Objective Lens	50mm f/1.0
Thermal Sensitivity	<25 mK	Battery / Power	(2) CR123 and external power via USB-C
Spectral Response	8-14 µm	Battery Life*	Battery Life w/ CR123 Only: Approximately 1.5 hrs. at 68°F (20°C) 1.0 hr. when video recording at 68°F (20°C). At 32°F (0°C) hours vary external battery pack recommended. External Battery Pack via USB-C: ~12-14 hours**
Wireless Connectivity	Wi-Fi	Environmental	-26°F (-32°C) to 131°F (55°C) Operating -40°F (-40°C) to 160°F (71°C) Storage
Media Type / Digital Format	H.264 Live Video / JPEG Image	Submersion	1m / 1 hr
Internal Memory	64GB	User Interface	5 button keypad
Reticle Options	Crosshair, MOA, MRAD, .223 BDC, .308 BDC, 300BLK BDC, 7.62x39 BDC, and Circle Dot	Mount	Picatinny Mount with Trijicon Q-LOC™ Technology
Detect, Recognize, Identify (70% Probability)	(NV-Therm) 2997m / 817m / 539m (NV-IPM) 919m / 342m / 250m		
Field of View	18° Diagonal / 14° Horizontal / 11° Vertical		

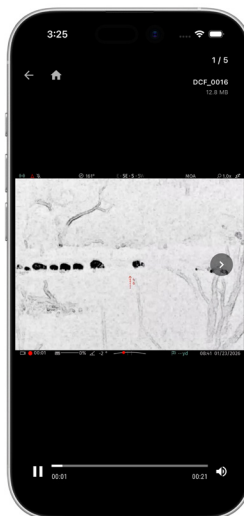
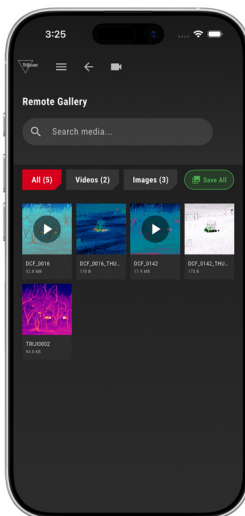
** NOTE: Battery life may be reduced by prolonged recording, WiFi usage, or use of the laser range-finder.
** NOTE: Actual run time will vary. Assumes 10,000mah battery pack under normal conditions and feature operation.*

Trijicon® App



Connect Wirelessly:

Access photos and video from your REAP-IR®-50 directly on your smart phone or tablet



Access Images and Video:

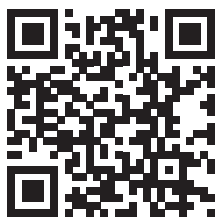
Watch video playback from your optic or export images and video easily with the app



GET IT ON
Google Play



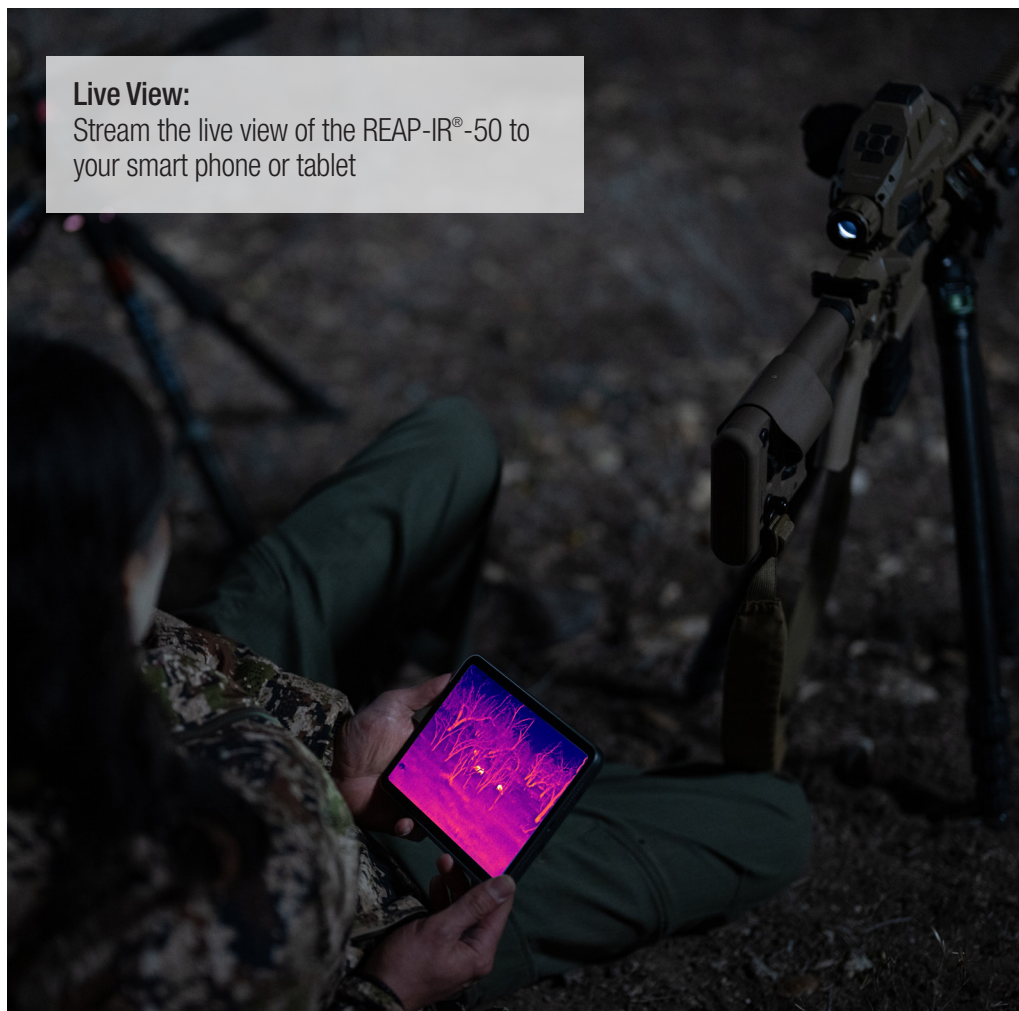
Download on the
App Store



Trijicon.com/App

Live View:

Stream the live view of the REAP-IR®-50 to your smart phone or tablet



Electro Optics Division

Trijicon.com/REAP

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