






Sensing Beyond Visible


PROFESSIONAL OUTDOOR OPTICS BRAND UNDER GUIDE SENSMART




 www.guideoutdoor.com


    @GuideOutdoor


Wuhan Guide Sensmart Tech Co., Ltd.
No.29, Gaoxin 3rd Road, Wuhan 430205, P.R.China

 +86 27 8129 8784

 enquiry@guideoutdoor.com

Guide Sensmart Technology GmbH
Neumeyerstrasse 30, 90411 Nuremberg, Germany

 +49 911 2170 7934

 repair.eu@guideir.com

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OUTDOOR PRODUCTS

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Sensing Beyond Visible.

Guide outdoor, the outdoor optics specialist for the digital age, designs and delivers advanced thermal imaging and night vision optics, including thermal monoculars, binoculars, night vision scopes, clip-on accessories, mobile apps, etc. to hunters, nature observers, outdoor enthusiasts, law enforcement officers, and rescue personnel in over 70 countries worldwide.

Focus on Thermal Imaging

As the world's leading thermal imaging optics manufacturer, we have been dedicated to thermal imaging technology for over two decades. From the moment of birth, we have been committed to pushing the limits of vision to enhance the human perception of the external environment. Our R&D team is always passionate about innovations and breakthroughs in thermal imaging technology: smaller pixel size, clearer imaging, and lower power consumption.....

Smart Social

With the advent of the digital network era, traditional optics manufacturers began to face great challenges. Never stop exploring, we soon found the answer. Our product design philosophy is centered on user experience, just like the familiar smartphone, with special attention to ergonomics, interactive design, and soft-hard combination. It also gives it strong social attributes, striving to create products that satisfy professional hunters and amateur outdoor enthusiasts.



Strict Quality Control

Our controlled production line, from the core components to the software platform, makes it possible to provide stable supplies to customers in over 70 countries worldwide, including thermal monoculars, binoculars, scopes, clip-on accessories, mobile apps, etc. We are so convinced that details make the difference between success and failure that quality control is never slack in manufacturing. We keep developing and introducing advanced process technology and demanding perfection in every part and every process to ensure the quality and stability of the equipment.

Social Responsibility

We believe that only by enriching human's ability to perceive the world can we experience the beauty of life to the fullest. Let us be the guardian of ecological balance with hunters; help nature research observers do our part in scientific development; assist outdoor sports enthusiasts in carrying out adventure activities safely; assist law enforcement officers in reducing crime to save more lives.

Listening to the call of the wilderness in nature and exploring the secrets of the unknown in the darkness of the night, Guide outdoor looks forward to being the safest and most intimate companion for outdoor explorers around the world.

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TE · TE Mini

THERMAL
MONOCULARS

Thermal Monoculars

TE SERIES

Smaller Yet Sharp





TE Mini (TE211M)



TE Series (TE211/TE411/TE421)



Sharp Image Quality

To achieve a crisp image clarity, the TE Series is equipped with a powerful 12µm detector and offers multiple resolutions and lenses to meet your needs in various scenarios and activities.

Ultimate Lightweight & Portable

The TE Series only weighs around 200 grams and features a compact, pocket-sized design that is smaller than a mobile phone and thinner than a wristwatch, offering a comfortable grip and exceptional portability.



1.43" AMOLED touch screen



Game-Changing Touch Screen

The TE Mini features an innovative large touch screen that provides direct ultra-clear viewing and seamless touch control. Users can easily swipe the menu and select functions with simple touch operations.

*for TE Mini



One Button & One Ring Smooth Operation

Drawing on years of outdoor experience, the TE Series offers an extremely simplified button design. With the one button and one ring, users can easily access the menu and select functions conveniently.

20W Quick Charge Worry-Free Power

The TE Series features a built-in rechargeable battery with 6-hour runtime and a 20W quick charge function. A 10-min quick charge ensures 1 hour of continuous use.

2.4GHz/5GHz WiFi Connection

The WiFi function has been upgraded to dual-band, providing stronger connectivity. The TE Series features faster transmission speeds and longer transmission distances, with upgrade packages downloading in just 10 seconds and a maximum transmission distance of 26.5 meters.

Audio-Visual Sync Recording the Best Moments

Equipped with a built-in microphone, the TE Series can take photos, record videos and audio as well, helping users capture and share the exciting moments of the adventures.



More Advantages



10/19/25mm Lens






Seven Color Palettes



Intelligent Sleep Mode



OTA Upgrade

Model	Sensor	NETD	Lens	Magnification	Display	Battery	Detection
TE211M	VOx 256 × 192 12μm	≤30mK	10mm F1.0	1.2x~4.8x	1.43" AMOLED 466 × 466	≥6h	500m 
TE211							
TE411	VOx 400 × 300 12μm	≤25mK	19mm F1.0	1.4x~5.6x	0.32" AMOLED 800 × 600	≥5h	1000m 
TE421			25mm F1.1	1.9x~7.6x			1300m 

TJ · TJ LRF · TJ LRF Pro · TJ LRF Zoom

THERMAL
MONOCULARS

Thermal Monoculars

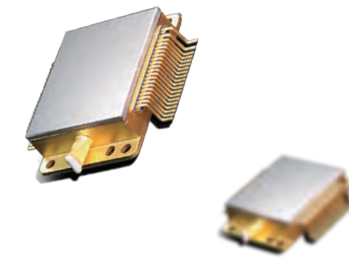
TJ SERIES

Welcome to the Big Screens



12μm IR Detector NETD as Low as 18mK

By utilizing a highly sensitive IR detector with a NETD as low as 18mK, even the slightest temperature differences can be distinguished, resulting in sharper and clearer imaging.



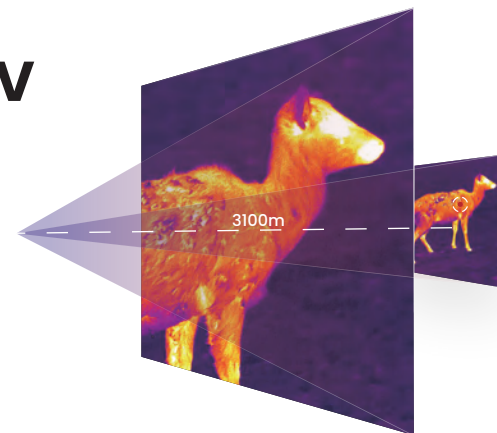
1920×1080 AMOLED Display Excellent Visual Experience

The eyepiece features a full-HD 1920×1080 AMOLED screen, allowing for a visual experience with vibrant colors and excellent image quality. This significantly enhances the comfort of observation.

3x Optical Zoom, Dual FOV

(for LRF Zoom Series)

TJ LRF Zoom Series adapts a 20mm/60mm dual FOV lens, which allows for wide and narrow field-of-view easily switched in one step. It is a perfect combination of large-scale and long-distance observation, capable of detecting targets up to 3,100m.



1500m ↑ LRF 1000m/1500m Laser Ranging

(for LRF Series, LRF Zoom Series and LRF Pro Series)

The built-in laser rangefinder provides a long detection range of up to 1,500m, improving the capability to obtain the target location and the long-distance perception.

25/35/50mm F1.0 Lenses Multiple Options

Multiple focal lengths enhance the capabilities of the TJ Series, offering greater versatility and options in diverse environments. The maximum 50mm F1.0 lens can indicate targets within 2,600m, which is convenient for observation and recording.

Blind-Operation in the Dark

The unique physical button design enables easy operation in the dark. The two standard 18650 batteries can be replaced only to make sure there's one positive "+" and one negative "-" pole of the two cells.



12h Ultra-Long Operation

(for TJ Series, TJ LRF Series)

To support outdoor observation and hunting continuously, TJ Series provides a long 12-hour battery life at -20 °C to 50 °C (-4°F to 122°F), ensuring a delightful user experience without fear of power outages.



Video Recording Including Sound

TJ Series supports both photo and video capture, featuring a built-in microphone to ensure audio is included in your recordings.

Intelligent Sleep Mode







































(for LRF Zoom Series)

TJ LRF Zoom Series developed an intelligent function of automatically switching the sleep mode and wake up mode by recognizing the device's posture, which will lead to lower power consumption and longer battery life.

Ambidextrous Design

Both left and right hands can operate easily. Left/right eye masks and wrist straps can be switched in one step.

More Advantages

 IP67 encapsulation	 Built-in 64G storage	 7 color palettes	 OTA upgrade	 Connect to APP					
	Model	Sensor	NETD	Lens	Magnification	Display	Battery	LRF	Detection
TJ Series High Sensitivity	TJ420	VOx 400 × 300 12μm	25mK	25mm F1.0	 3.04x~12.16x	0.39" AMOLED 1920x1080	 ≥12h	/	1300m 
	TJ430			35mm F1.0	 4.25x~17.0x				1800m 
	TJ630	VOx 640 × 512 12μm	20mK	35mm F1.0	 2.66x~21.28x		 ≥10h		1800m 
	TJ650			50mm F1.0	 3.79x~30.32x				2600m 
TJ LRF Series Multi-Function	TJ420L	VOx 400 × 300 12μm	25mK	25mm F1.0	 3.04x~12.16x	0.39" AMOLED 1920x1080	 ≥12h	1000m	1300m 
	TJ430L			35mm F1.0	 4.25x~17.0x				1800m 
	TJ630L	VOx 640 × 512 12μm	20mK	35mm F1.0	 2.66x~21.28x		 ≥10h		1800m 
	TJ650L			50mm F1.0	 3.79x~30.32x				2600m 
TJ LRF Pro Series High Resolution	TJ630LP	VOx 640 × 512 12μm	20mK	35mm F1.0	 3.31x~26.48x	0.5" AMOLED 1600x1200	 ≥9h	1500m	1800m 
	TJ650LP			50mm F1.0	 4.73x~37.84x				2600m 
	TJ1250LP	VOx 1280 × 1024 12μm	18mK	50mm F1.0	 2.36x~37.76x		 ≥6h		2600m 
TJ LRF Zoom Series Dual FOV	TJ660LZ	VOx 640 × 480 12μm	20mK	20mm F0.9	 1.5x~12.0x	0.39" AMOLED 1920x1080	 ≥10h	1000m	1000m 
				60mm F1.1	 4.5x~36x				3100m 

TD Gen2 • TD Gen2 LRF

THERMAL
MONOCULARS

Thermal Monoculars

TD GEN2 SERIES

Thermal Imaging with
Laser Ranging
All in Your Control



Tiny and Powerful

A lightweight body, which can be controlled by one hand, is comfortable to hold, and has no burden to carry and explore.

Image Details Boost

The 12μm high sensitivity infrared detector and a 0.23-inch AMOLED display with 640 x 400 resolution to better depict image edges and details, providing a clear and detailed thermal image for a comfortable viewing experience.



User Experience-Oriented

- New user interface design to simplify operation; iconized operation without language restrictions.
- Simplify the key logic to avoid consuming user memory and enhance the comfort of use.

Boot up in 2 Seconds

The device has entered working mode by touching the power button, which is convenient for you to explore outdoors efficiently.



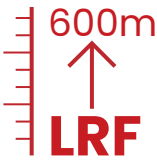
Super Long
Operation Time

Over 10 hours of active use, 3 hours improvement over the previous generation (with TD21I up to 12 hours). Standard 18650 battery, easy to purchase.



Built-in Laser Rangefinder

The TD Gen2 Series can achieve 600 meters of accurate distance measurement with the built-in laser rangefinder, allowing for the precise distance information of prey without user calibration.



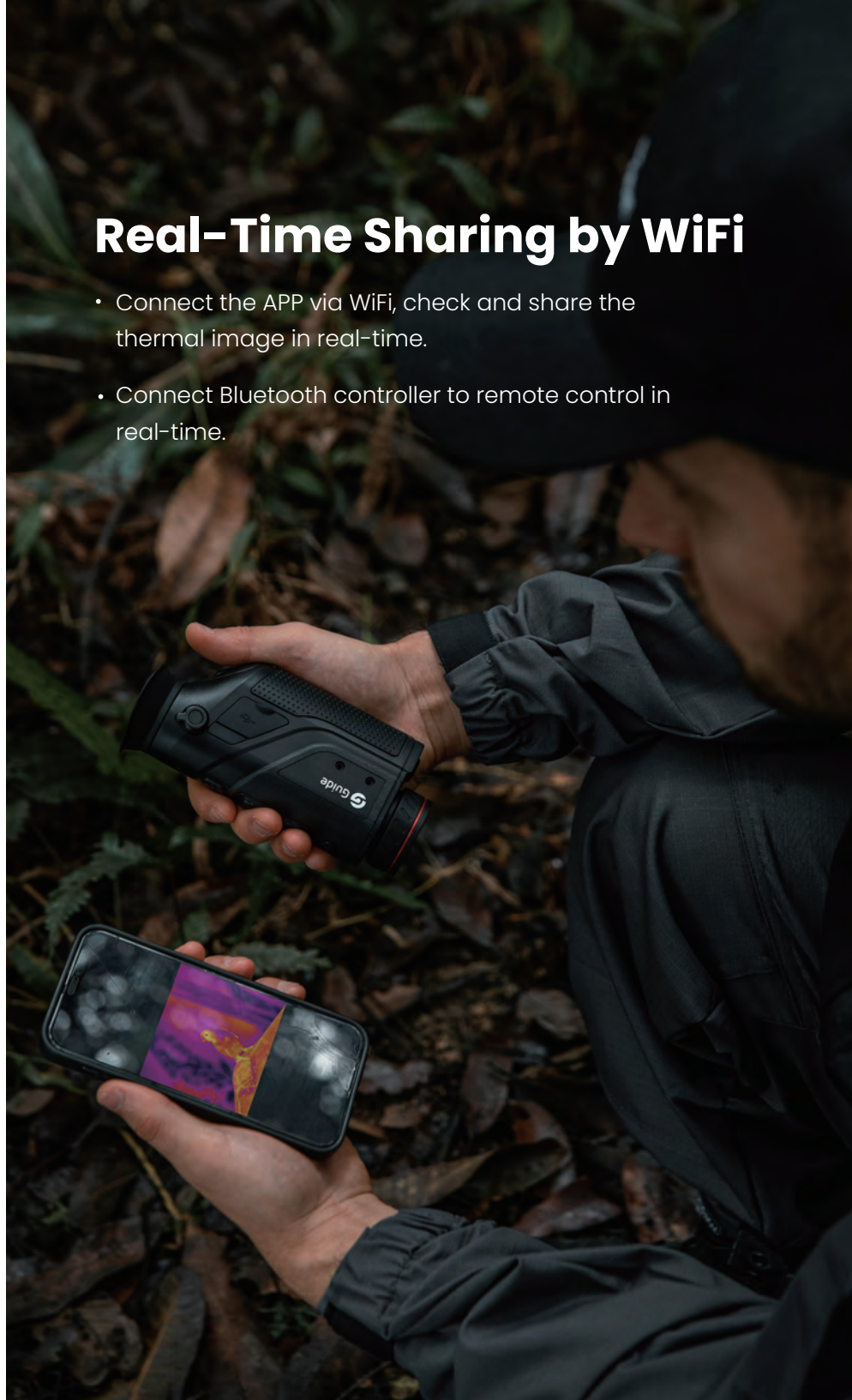
OTA Upgrade

Support device firmware updates by connecting TargetIR APP for high efficiency.



Real-Time Sharing by WiFi

- Connect the APP via WiFi, check and share the thermal image in real-time.
- Connect Bluetooth controller to remote control in real-time.



Five Color Palettes

Support a one-button switch to instantly identify the target's location, helping to achieve all-weather observations.



PIP Mode

The PIP mode can zoom in on the target when you are in complex outdoor scenes, and highlight the details of the target.



Three Scene Modes

Natural/Enhanced/Highlight Mode. Choose a suitable scene for different environments to find the target quickly.



IP66, 1-meter Drop Test

With IP66 waterproof-rated for protection from heavy rainfall, dust, and impact. The working temperature is from -30°C to 50°C, suitable for all kinds of harsh weather.



Model	Sensor	NETD	Lens		Magnification	Display	Battery	LRF	Detection
TD21I	VOx 256 × 192 12μm	≤50mK	10mm	F1.0	1.1x~2.2x	0.23" AMOLED 640 × 400	≥12h	/	500m
TD41I	VOx 384 × 288 12μm	≤35mK	19mm	F1.0	1.4x~5.6x		≥10h		1000m
TD42I			25mm	F1.1	1.9x~7.6x				1300m
TD43I			35mm	F1.0	2.6x~10.4x				1800m
TD41I LRF	VOx 384 × 288 12μm	≤35mK	19mm	F1.0	1.4x~5.6x	0.23" AMOLED 640 × 400	≥10h	600m	1000m
TD42I LRF			25mm	F1.1	1.9x~7.6x				1300m
TD43I LRF			35mm	F1.0	2.6x~10.4x				1800m
TD63I LRF	VOx 640 × 480 12μm		35mm	F1.0	1.7x~13.6x		≥8h		1800m

TN

THERMAL
BINOCULARS

Thermal Binoculars

TN SERIES

Fearless the Darkness
All in Your Eyes

Ergonomic Design Easy Observation

Binocular design, greatly reducing the fatigue feeling of long-time observation; adjustable interpupillary distance between 60mm~70mm, catering to a different group of people; ergonomic design, raised buttons can be quickly recognized by touch even in total darkness.



Integrated Laser Rangefinder up to 1500m



The TN Series has a built-in laser ranging module, which provides both single ranging and continuous ranging with an accuracy of ± 1m within 1500m, helping to capture target distance accurately.

High-Quality Imaging in Day and Night

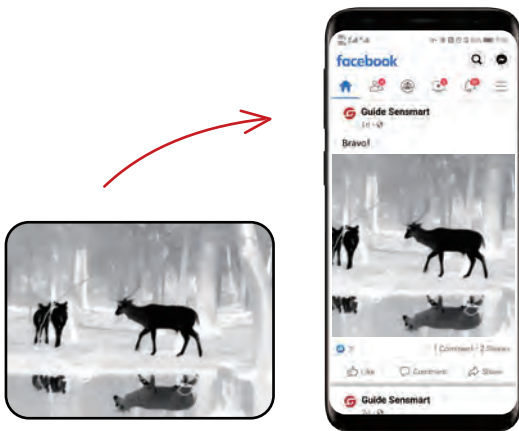
Up to 640 × 480 VOx uncooled IR resolution and 50Hz image frame rate, ensure the observation of moving target smoothly.





Photo and Video Recording

Support photos and videos, recording wonderful moments at any time. Realize remote control, live image, and video transmission via WIFI connection, can share to your social media by APP.



Three Scene Modes

“Enhance/Highlight/Natural” can be quickly switched by one button, the image can be adaptively adjusted for different scenes, and “Enhance/Highlight” can effectively reduce image impurities to highlight the target.



Full Color 1024x768 HD AMOLED Display

Enhanced color rendering offers a highly contrasted image, allowing more comfortable and precise observation.

More Advantages



IP66, 1-meter Drop Test



Smooth Zoom for Flexible Searching



PIP Mode



Six Color Palettes

Model	Sensor	NETD	Lens	Magnification	Display	Battery	LRF	Detection
TN430	VOx 400 × 300 17μm	≤30mK	35mm F1.2	2.3x~9.2x	0.39" AMOLED 1024×768	≥5.5h	1000m	<div>1300m</div>
TN450			50mm F1.2	3.2x~12.8x				<div>1800m</div>
TN630	VOx 640 × 480 12μm		35mm F1.2	2.0x~16.0x			1500m	<div>1800m</div>
TN650			50mm F1.2	2.8x~22.4x				<div>2600m</div>

TB · TB LRF · TB Pro · TB LRF Pro

FRONT
ATTACHMENTS

Front Attachments

TB SERIES

IP68: Conquering Wind and Rain

Megapixel IR Resolution NETD Down to 18mK

Utilizing the uncooled VOx 12μm infrared detector with multiple resolutions up to 1280×1024, and NETD down to 18mK, the TB Series provides a crystal-clear image in both day and night time.

Compact Design Lightweight and Portable

Compact and rugged, portable and powerful, the TB Series shares the design features of pocket size and magnesium alloy housing, easier to carry out and install.



Unique Design for Easy Operation in the Dark

Double side focus knob, replaceable 18650 batteries, and unique button design make it much easier for both right- and left-hand users to adjust the device during shooting, hunting or searching, etc.



Full-HD 1920x1080 AMOLED Display

The TB Series is equipped with a 0.39" full-HD 1920x1080 AMOLED display, presenting an excellent visual experience with more details for users.



50mm Lens 2600m Detection Range

(for Pro Series and LRF Pro Series)

TB Pro Series utilizes a longer focal length of 50mm to provide a longer observation distance of up to 2600m/2800yd, helping users to see farther and observe more details.



IP68 Dustproof & Waterproof

The high protective features of IP68 encapsulation, 2-meter drop resistance, and 1000G shock resistance, support your outdoor adventures in rain, fog, and other harsh environments.

Accurate 1000 Meters Laser Ranging

(for LRF Series and LRF Pro Series)

Built-in laser range finder module provides an ultra-long 1000m/1090yd detection distance, helping users gain the target location to make decisions quickly and precisely in the dark.

Video & Audio Recording

Enable video recording triggered by firearm recoil, with synchronized audio capture, to immortalize thrilling moments

More Advantages



OTA upgrade



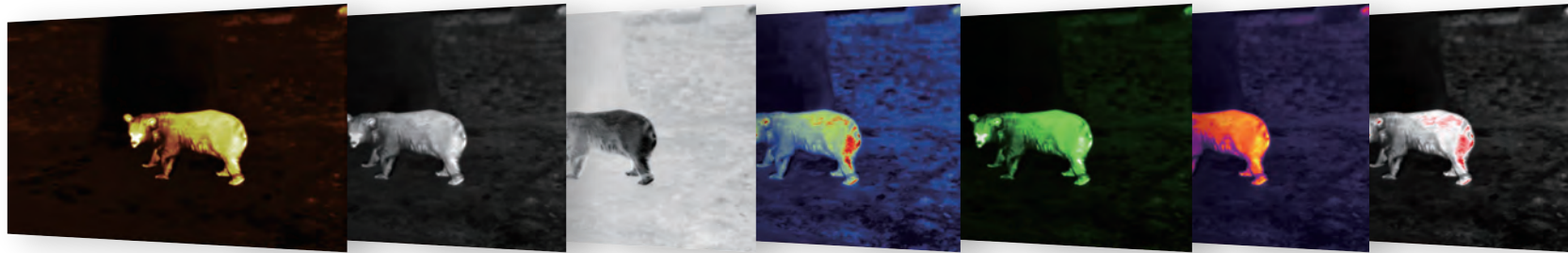
Connect to APP



Built-in 64G storage



1000G shock



Seven Color Palettes

	Model	Sensor	NETD	Lens		Magnification	Display	Battery	LRF	Detection
TB Series Lightweight	TB420	VOx 400 × 300 12μm	25mK	25mm	F1.0	1x	0.39" AMOLED 1920x1080	≥12h	/	1300m
	TB430	VOx 400 × 300 12μm		35mm	F1.0					1800m
	TB630	VOx 640 × 512 12μm	20mK	35mm	F1.0			≥10h		1800m
TB LRF Series Multi-Function	TB630 LRF	VOx 640 × 512 12μm	20mK	35mm	F1.0	1x	0.39" AMOLED 1920x1080	≥ 6h	1000m	1800m
TB Pro Series High Resolution	TB650P	VOx 640 × 512 12μm	20mK	50mm	F1.0	1x	0.39" AMOLED 1920x1080	≥ 9h	/	2600m
	TBI250P	VOx 1280 × 1024 12μm	18mK					≥ 6h	/	
TB LRF Pro Series High Resolution	TB630LP	VOx 640 × 512 12μm	20mK	35mm	F1.0	1x	0.39" AMOLED 1920x1080	≥ 9h	1000m	1800m
	TB650LP	VOx 640 × 512 12μm		50mm	F1.0					2600m
	TBI250LP	VOx 1280 × 1024 12μm	18mK	50mm	F1.0			≥ 6h	1500m	2600m

TS432L · TS632L

THERMAL
SCOPES

Thermal Scopes

TS GEN2 SERIES

Zoom with Ease

Sensitive IR Detector Crisp Image Resolution

The TS Gen2 Series is equipped with a 12μm infrared detector, offering infrared resolution configurations of 400×300 and 640×512, NETD achieves 20mK. The 35mm lens provides a detection range of up to 1800 meters.

Continuous Zoom with Smooth Rotation



The electronic zoom ring is designed for smooth, continuous zooming, offering a comfortable and intuitive handling experience that allows users to quickly and effortlessly lock onto targets.



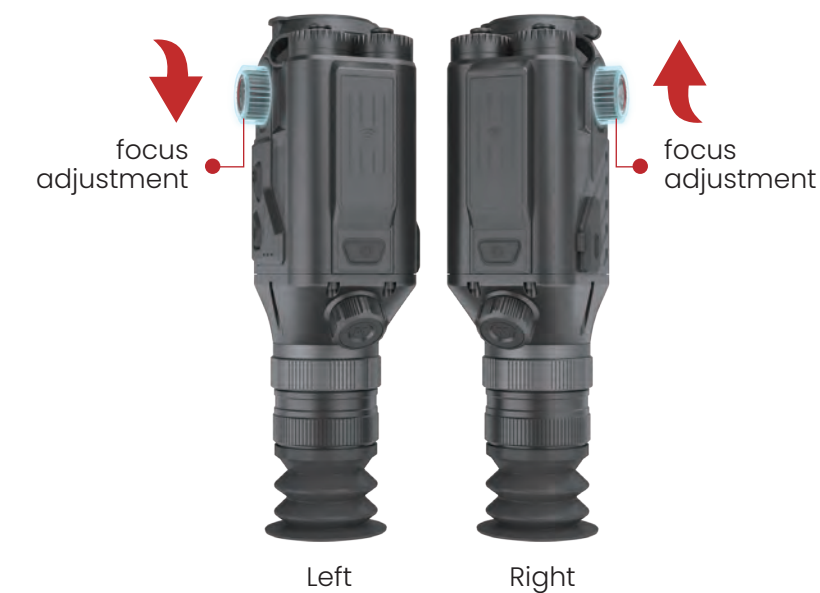
Accurate 1000m Laser Ranging

The TS Gen2 Series integrates a highly accurate laser rangefinder up to 1000 meters, paired with TargetLR Ballistics APP to enable long-range precision shooting.



Dual-Side Focus Knob Ergonomic Design

The button and interaction design prioritize user experience, simplifying steps for ease of use. The dual-side focusing knob and rotary menu knob offers convenience for operation in the dark.



Smart Recording for BEST Shots



During shooting, the TS Gen2 Series automatically records a 15-second video before and after the shot and captures five photos after to highlight key moments.

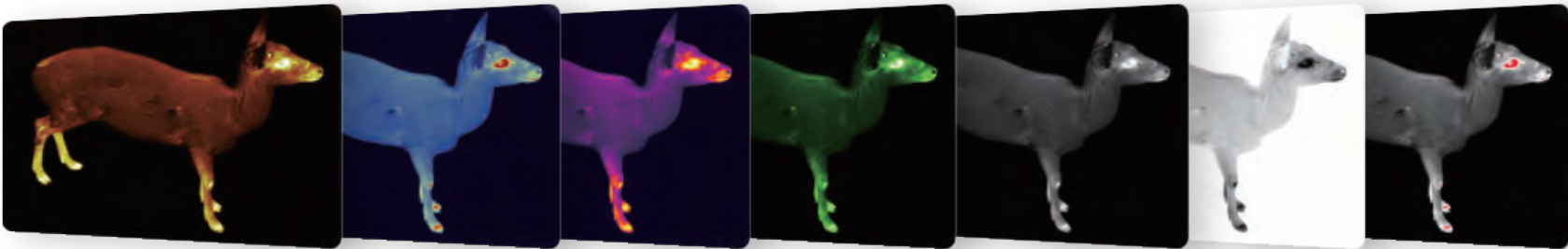
Rugged Waterproof Devices

Built to high-quality standards, the TS Gen2 Series features exceptional 1000G shock resistance, protecting against recoil forces, shocks, and vibrations. Its robust housing achieves an IP68 waterproof rating, ensuring durability for outdoor hunting in humid environments.



Mobile Applications & Ballistic Calculator

Based on the different needs in the wild, the device offers real-time infrared image preview, remote control, video recording and playback, file management, and OTA upgrade functions through TargetIR APP. It also helps users achieve high-precision shooting with the advanced TargetIR Ballistics APP.



Seven Color Palettes

More Advantages



AMOLED Display 1920x1080



32GB~64GB Storage



WiFi Connection



OTA Upgrade

Model	Sensor	NETD	Lens	Magnification	Display	Battery	LRF	Detection
TS432L	VOx 400 × 300 12μm	≤25mK	35mm F1.0	2.6x~10.4x	0.39" AMOLED 1920x1080	≥6h	1000m	1800m
TS632L	VOx 640 × 512 12μm	≤20mK		1.7x~13.6x		≥5.5h	1000m	1800m

TU Gen2 · TU Gen2 LRF

THERMAL
SCOPES

Redefine Hunting
by Laser Ranging

Thermal Scopes

TU GEN2 SERIES

2024 UPGRADE



VOx 12μm High Definition Thermal Sensor

High-quality thermal imaging with clear distinctions allows for improved recognition of animals, their body parts, and even minute elements such as branches, leaves, grass, and the landscape.

Full Color 1440x1080 HD AMOLED Display

Enhanced color rendering offers a highly contrasted image, allowing more comfortable and precise observation.



Tradition Retention

Traditional-style design with 30 mm standard mount rings, meets the needs of professional hunters who value traditions.

12 Hours Strong Battery Life

Support 12 hours of super long operation time by a dual battery system consisting of internal and external batteries. External battery can be replaced without power-off, ensuring all-day operations.



Photo, Video and Audio Recording

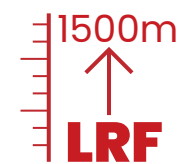
Keep the best moments of observation and share them with your friends and hunting partners. One touch of a button is enough to capture an interesting moment or start recording a video with sound.

IP67 Waterproof Rated

The IP67-rated design creates protection from rain, and snow, even when it drops into 1 meter of water for up to 30 minutes.

OTA Upgrade Ballistic Calculation

Support device firmware updates by connecting to the TargetIR APP for high efficiency.

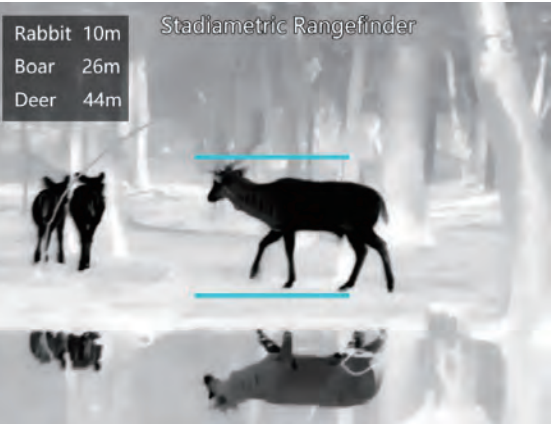


Fast Detection up to 1500m LRF

The compact ranging module, which has been recently created, offers accurate and rapid detection, allowing you to identify targets at distances of up to 1000 or 1500 meters during nighttime hunting, thus enhancing your hunting efficiency.

Built-in Stadiametric Rangefinder

Stadiametric rangefinder can accurately measure the range of observed objects with known height (Rabbit – 35cm, boar – 90cm, deer – 150cm), and the real-time ranging information will be shown both on the thermal monocular and the mobile APP.



No Need Conversion

Reticle density can be zoomed in synchronously with the image, and the reticle line width can be maintained at any magnification, without conversion, avoiding errors, and helping hunters improve shooting accuracy.



Multiple Reticle Profiles

10 Reticle Groups | 10 Reticle Types | 6 Colors



More Advantages



48mm eye relief



10 sets zero calibration configurations



Distance setting



Wireless remote control



Multiple languages



Variable digital zoom

Model	Sensor	NETD	Lens		Magnification	Display	Battery	LRF	Detection
TU431	VOx 400 × 300 12μm	25mK	35mm	F1.0	3.3x~13.2x	0.49" AMOLED 1440×1080	⚡ ≥12h	/	1800m
TU451			50mm	F1.0	4.7x~18.9x				2600m
TU631	VOx 640 × 512 12μm	20mK	35mm	F1.0	2.1x~16.6x				1800m
TU651			50mm	F1.0	3.0x~23.6x				2600m
TU431 LRF	VOx 400 × 300 12μm	25mK	35mm	F1.0	3.3x~13.2x			1500m	1800m
TU451 LRF			50mm	F1.0	4.7x~18.9x				2600m
TU631 LRF	VOx 640 × 512 12μm	20mK	35mm	F1.0	2.1x~16.6x			1500m	1800m
TU651 LRF			50mm	F1.0	3.0x~23.6x				2600m

TR420 · TR430 · TR450 · TR620 · TR630 · TR650

THERMAL
SCOPES

Thermal Scopes

TR SERIES

2024 UPGRADE

Enduring Performance
Day and Night

Higher Image Quality and New 1024×768 AMOLED

The powerful VOx 12μm imaging sensor with NETD down to 20mK, the optional objective lens of 25 mm, 35 mm, and 50mm focal length, and the upgrade 1024×768 AMOLED display improve the clarity, details, and layering of thermal images.

Target Height Configuration and Range Notification

The function of setting the height of the target for a stadiametric rangefinder can adapt to the size of the prey in different areas. And first-time range notification enables users to set the prey height and effective range. Users can easily determine whether the prey enters the range through the notification line on the interface.



Built-in Storage and WIFI Connection

The TR Series is built with a memory of 32GB which can support storing video (with sound) and pictures. The WIFI hotspot of the product supports the simultaneous connection of four devices.



External Laser Range Finder

With an external laser range finder, the TR series can achieve 600 meters of accurate distance measurement for quick target searching, allowing for direct connection on boot, and no manual pairing.

Ballistic Calculation

Connect the device to TargetIR Ballistics APP (Android or iOS) to set bullet and weather parameters, then transmit the data to the device for ballistic calculation, and achieve high-precision shooting easily.



Quick-Release Scope Mount

Simply mount the device onto the quick-release scope mount, then tighten the locking lever, and the TR Series can be easily and securely mounted without any other tools.

OTA Upgrade

Support device firmware updates by connecting TargetIR APP for high efficiency.

Photo, Video and Audio Recording

Support photo and video with audio recording, capture wonderful moments at any time, easy to share.



Three Scene Modes

“Enhance/Highlight/Natural” can be quickly switched by one button, the image can be adaptively adjusted for different scenes, and “Enhance/Highlight” can effectively reduce image impurities to highlight the target.

Screen Freezing

Zero calibration interface supports screen freezing, quick and easy to zero.



Strong Battery Life



Shock Resistance



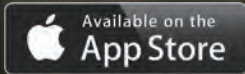
Waterproof Rated



TargetIR



TargetIR Ballistics



Adjustable Image Brightness and Contrast

Experienced users have more options in tuning the image for different scenarios. Users can adjust image brightness adjustment, image contrast adjustment, and cold and warm color palette switching, it is adaptable to multiple types of environments. Customers can have more options for adjustment and better playability.



Variable Digital Zoom

Digital zoom up to 8x enables better focus on small targets from a greater distance.



Multiple Reticle Profiles

10 Reticle Groups | 10 Reticle Types | 6 Colors



Model	Sensor	NETD	Lens	Magnification	Display	Battery	Detection
TR420	VOx 400 × 300 12μm	≤25mK	25mm F1.0	2.3x~9.2x	0.39" AMOLED 1024 × 768	≥8h	1300m
TR430			35mm F1.0	3.3x~13.2x			1800m
TR450			50mm F1.0	4.7x~18.8x			2600m
TR620	VOx 640 × 512 12μm	≤20mK	25mm F1.0	1.5x~12.0x			1300m
TR630			35mm F1.0	2.1x~16.8x			1800m
TR650			50mm F1.0	2.9x~23.2x			2600m

DN30

HANDHELD DIGITAL
BINOCULARS

Handheld Digital Binoculars

DN SERIES

4K Ultra-HD Imaging
for Day and Night Servicing

4K Sensor with Clear Imaging

Equipped with a 4K ultra-HD sensor, it captures clear images without being restricted by time and light, revealing the true appearance of animals in the darkness.



Shooting time 21:00



1920x1080 AMOLED High-definition Display for the Ultimate Vision

A high-resolution, high-contrast, and high-gamut 0.39-inch display brings better image quality and visual effects.

Photo and Video by One-touch

The DN Series can be used by outdoor enthusiasts to record beautiful moments and share happiness.

WiFi Connection

Supports local WiFi connection with the TargetIR App, allowing peers to synchronize real-time previews and remote control. It's also easy to share the visuals on social media.



Ergonomics Design for Better Experience

Large field of view: 12.57°x7.12°
Easy to grip: Dimensions 162×146×70mm
Comfortable observation: Binocular design
User-friendly: Adjustable interpupillary distance from 60mm to 70mm, providing the best viewing experience



More Advantages



Rugged and durable



OTA Upgrade



Three Viewing Modes



6h strong battery life



1000m laser ranging

Model	Sensor	Lens	Magnification	Display	Battery	LRF	Detection
DN30	CMOS 3840×2160 2μm	35mm F1.0	1.96x~15.68x	0.39" AMOLED 1920×1080	≥6h	1000m	600m (with IR 940 nm)

DR30

DAY & NIGHT
VISION SCOPE

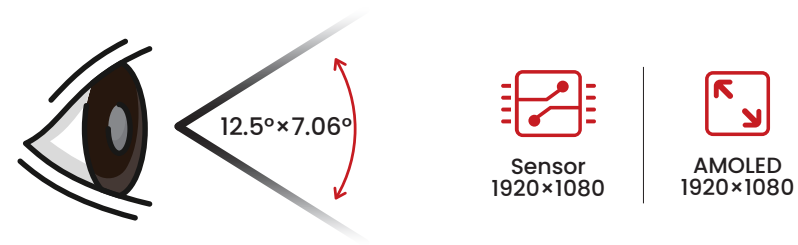
Day & Night Vision Scope

DR SERIES

Full-Screen Vision
See Beyond the Dark

Ultra Large FOV Experience

The 1920×1080@4μm sensor resolution comes with a 35mm lens creating a large field of view of 12.5°×7.06° while the 1920×1080 full HD AMOLED display ensures your viewing experience. Images are smoother and more detailed.



Clear Nighttime Imaging

Upgraded algorithms balance the image brightness on the display when using the scope with an IR illuminator. Additionally, they eliminate flood exposure from foreground objects and increase the brightness of distant objects to a comfortable level, thus offering exceptional crisp images with less noise, ensuring a professional nighttime outdoor experience.



OTA Upgrade

Firmware updates have become more intuitive, easier, and more convenient through OTA upgrades. By connecting to TargetIR APP, you can automatically update the firmware at home.



One-touch Freeze

Screen freeze for quick and easy zeroing improves accuracy and enhances user convenience, contributing to a better user experience.



More Advantages



IP67 Waterproof



Three Viewing Modes



WIFI and APP Support

Model	Sensor	Lens	Magnification	Display	Battery	Detection
DR30	CMOS 1920×1080 4μm	35mm F1.2	2.175x~17.4x	0.39" AMOLED 1920×1080	≥6h	500m (with IR 850 nm) 450m (with IR 940 nm)

DU50

NIGHT VISION
SCOPES

Night Vision Scopes

DU SERIES

Day and Night
the Ideal Hunting Partner



Highly Sensitive 1920x1080 Sensor

The DU50 uses a high-quality 4 μm sensor with 1920x1080 pixel resolution, offering an exceptionally crisp image for image acquisition.



Strong Battery Life

Up to 15 hours of battery life on a single charge.

Full Color 1920x1080 HD AMOLED Display

The TDE-Tech and PureIR bring crisp, richly contrasted thermal imaging for enhanced identification of targets, their extremities, and even the smallest details.



Tradition Retention

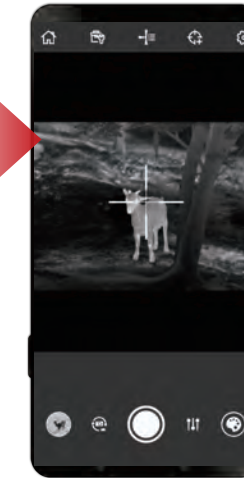
Classical-style design fit with 30 mm standard mount rings, meets the needs of professional hunters who value traditions.

WIFI and APP Support

The built-in WIFI module connects the DU50 with a smartphone (Android or iOS) through the Target IR mobile application, which supports real-time image transmission to the smartphone and remote control.



TargetIR



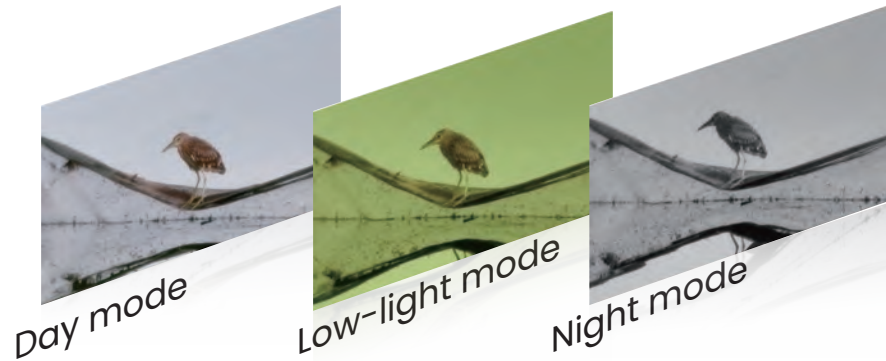
32GB Storage

The DU50 comes with a larger storage capacity of 32GB for nearly 40,000 images and videos of several hours.



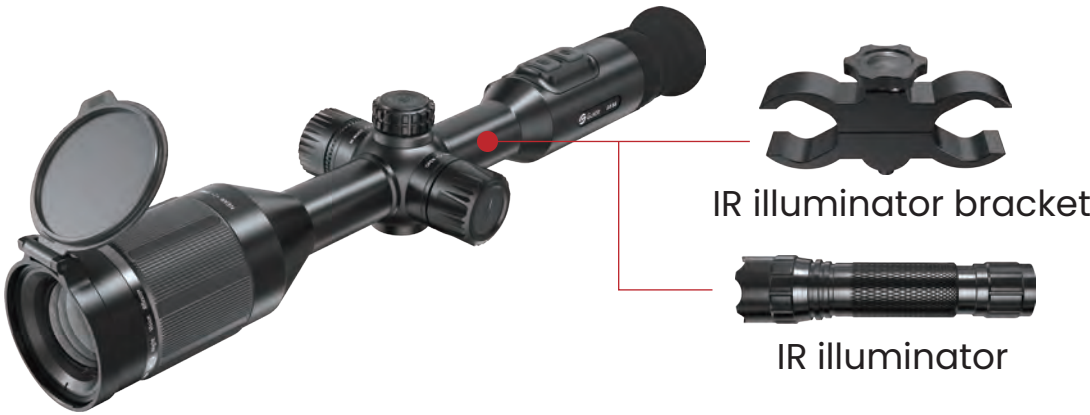
Three Viewing Modes

Day Mode for realistic color rendering, Low-light mode to capture and display every detail, and Night Mode for every motion capture.



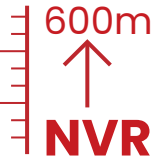
IR Illuminator

Guide DU50 can be supported by an 850nm or 940nm IR illuminator to increase the brightness of distant objects to a level that meets the observation needs.



Variable Digital Zoom

Digital zoom up to 8x enables better focus on small targets from a greater distance.



600m Night Viewing Range

When paired with an invisible IR illuminator, the Guide DU50 enables itself to be a high-efficiency tool that detects targets like deer or wild boar from 600 meters.

More Advantages



IP67 Waterproof Rated



Multiple Reticle Profiles

Model	Sensor	Lens	Magnification	Display	Battery	Detection
DU50	CMOS 1920×1080 4μm	50mm F1.2	3.125x~25x	0.39" AMOLED FHD 1920×1080	≥15h	600m (with IR 850 nm)
						550m (with IR 940 nm)

TL430 · TL450 · TL630 · TL650

MULTISPECTRAL
DEVICES

Multispectral Devices

TL SERIES

Triple Light, Total Insight

All-in-one Design for All-day and All-weather Observation

With integrated thermal and night vision, considering both the daytime and the nighttime, for quick search and target identification.



Night Vision

Thermal

1920×1080 AMOLED Display

High resolution 0.39" 1920×1080 AMOLED is capable of lower power consumption, wider viewing angle, and richer color, providing a better observation details.



Integrated HD Thermal Detector and Digital Sensor

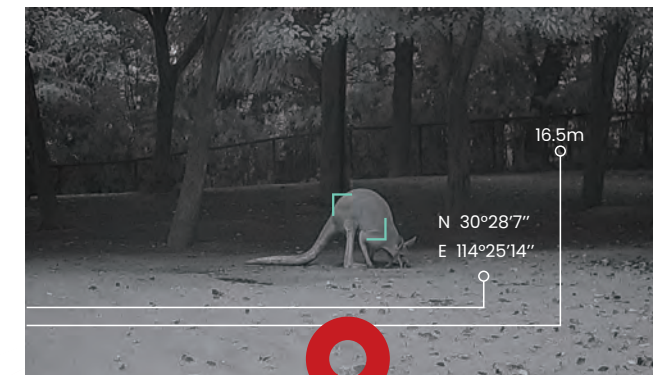
High-quality thermal imaging and night vision with clear distinctions allow for improved recognition of animals, their body parts, and even minute elements such as branches, leaves, grass, and the landscape, day and night.

Thermal Detector

400×300@12μm
640×480@12μm

Digital Sensor

1920×1080@4μm, CMOS



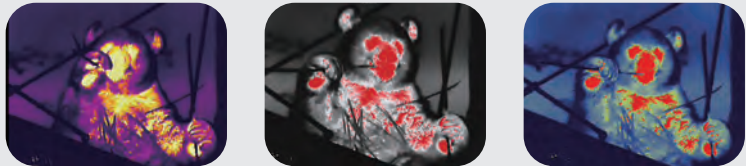
Built-in GPS for Target Positioning

GPS systems display the target latitude and longitude for accurate positioning, essential for hunters in navigation, safety, mapping, game tracking, and providing valuable environmental information. Integrated with a built-in laser rangefinder and gyroscope, target distance and device angle information can be obtained for quick aiming.

Combined Multispectral Viewing Modes

You can use the TL Series in several distinct image modes including a conventional thermal monocular with the choice of 5 color palettes, a highly detailed daylight & night vision optical camera, or the unique Fusion mode which adds the detail from the optical image to boost the performance of the thermal channel, delivering the ultimate in detection and detail.

Infrared Mode Iron Red / Red Hot / Blue Hot / White Hot / Black Hot



Visible Light Mode Daytime / Nighttime / Low-light



Fusion Mode Fusion 1 / Fusion 2 / Fusion 3



Built-in Precision Laser Rangefinder

The integrated high-precision laser range module can achieve 600m accurate laser ranging, allowing for the precise distance information of targets without calibration.

5 Hours Battery Life

The device supports a single 18650 battery, which is removable. Only two batteries are needed for up to 10h of use, making extended hunting trips possible without any power concerns. Replacement batteries are readily available and economical to buy.

OTA Upgrade

The device firmware can be upgraded remotely via TargetIR App to improve and optimize functions and interactions, keep the product in the best condition, and bring users a better experience.

Rugged and Durable

IP67 offers strong protection even in various harsh outdoor environments such as high humidity and heavy rain weather.

Model	Sensor Thermal Digital		NETD	Lens	Magnification	Display	Battery	LRF	Detection
TL430	VOx 400×300	CMOS 1920×1080 4μm	≤30mK	35mm F1.0	2.3x~9.2x	0.39" AMOLED 1920×1080	≥5h	600m	1800m
TL450	12μm 30mK			50mm F1.2	3.3x~13.2x				2600m
TL630	VOx 640×480			35mm F1.0	1.5x~12x				1800m
TL650	12μm 30mK			50mm F1.2	2.0x~16.0x				2600m



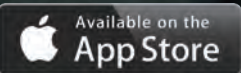
MOBILE
APPLICATIONS



TARGETIR



TargetIR



Real-Time Preview

By connecting to Wi-Fi, it supports real-time HD infrared preview from the optics, with seamless switching between landscape and portrait modes.

Remote Control

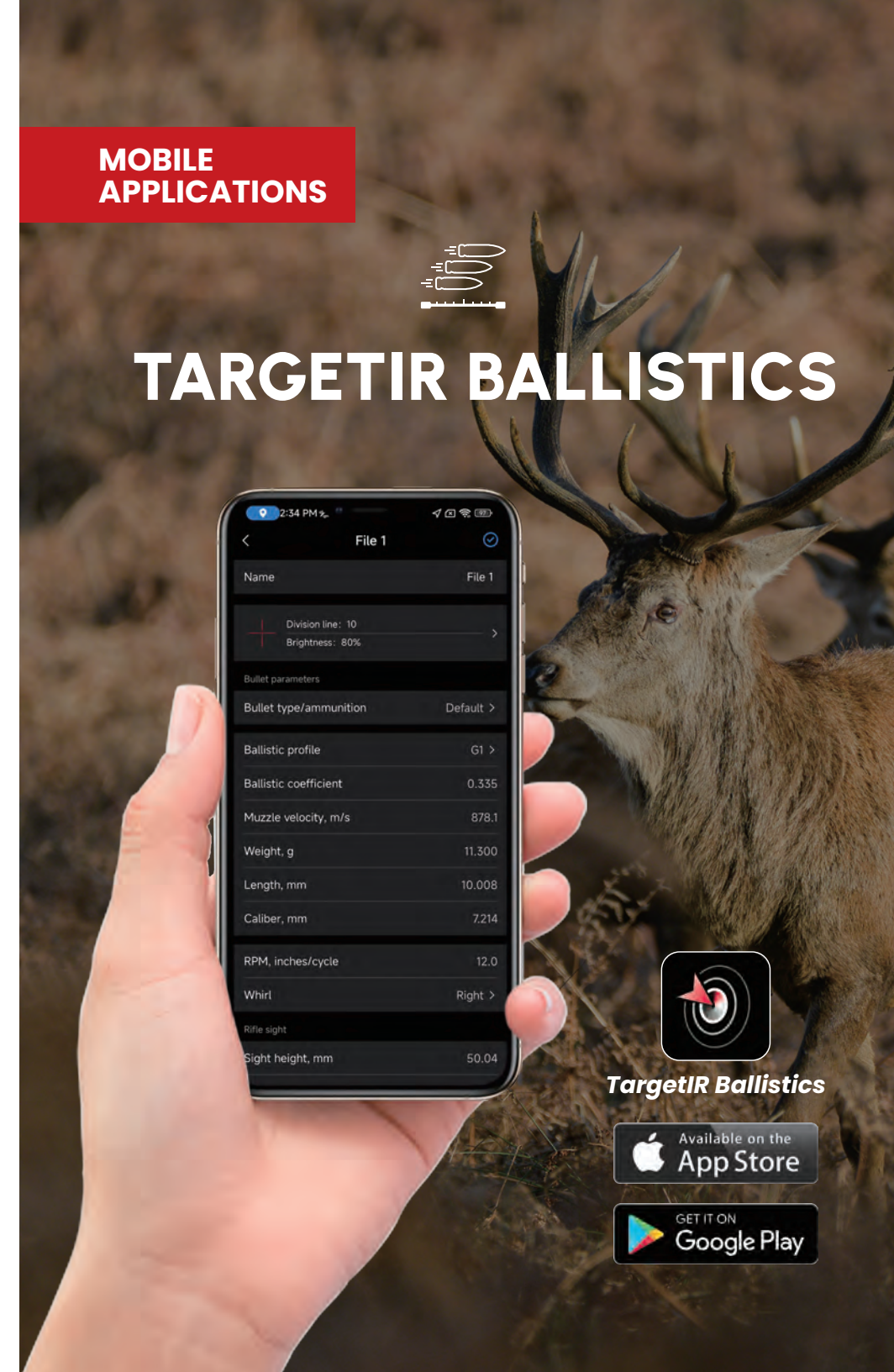
Through the TargetIR APP, users can remotely control the thermal optics with full functionality, including taking photos, recording videos with audio, stadiametric range-finding, hotspot tracking, color palette switching, smooth zooming, image quality adjustment, and more.

File Management

It is capable of synchronously managing local and device folders, including viewing, deleting, and sharing files.

OTA Upgrade

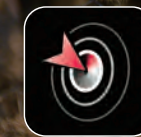
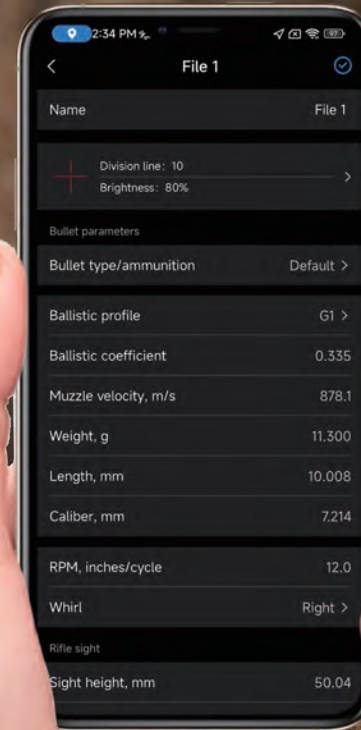
New models support OTA firmware upgrade via TargetIR APP, enabling easy updates to keep the device up to date.



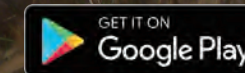
MOBILE
APPLICATIONS



TARGETIR BALLISTICS



TargetIR Ballistics



Ballistic Database

TargetIR Ballistics features a regularly updated ammunition database that contains a wide range of bullet types and ammunition from popular brands on the market.

Data Collection

The APP integrates a rangefinder, anemometer, thermometer, hygrometer, barometer, altimeter, and other measuring instruments into one device. Users can manually input parameters or update them via the Internet.

Ballistic Calculator

Equipped with a precise ballistic algorithm for accurate corrections, TargetIR Ballistics can calculate the suggested point of aim (POA) based on the optics and bullet type after users input the required distance, weather, and other data.

Preset Profiles

Users can preset and edit profiles for each optic to simplify pre-hunting preparation. During the hunt, users can adjust settings based on specific environmental conditions to find the most suitable configuration, and files stored in the Cloud will be synchronized.

Notes

