

# TR series

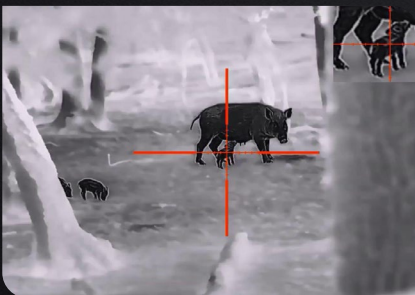
Thermal Imaging  
Riflescope

Enduring Performance, Day and Night



## Introduction

TR Series is an economical civilian infrared thermal imaging riflescope that adopts high sensitivity thermal detector with three different lens options of 25 mm, 35 mm, 50 mm. The TR Series offers sharp and detailed images while retaining the accuracy. TR thermal riflescope also features with compact size, waterproof and dustproof, high shock resistance, rugged and durable, which performs impressively in any harsh weather.



## Features and Benefits

- Fast and easy replaceable 18650 battery for 8 hours of operation
- 1024x768 resolution HD OLED display for image detail
- Support photo and video, record wonderful moments at any time, easy to share
- Screen freezing for quick and easy zeroing
- Support device firmware updates by connecting TargetIR APP
- Get precise 600m laser ranging using an external range finder
- A wide range of operating temperatures (-30°C to 50°C)
- IP 67 dustproof and waterproof rated

## Applications

- Outdoor Observing
- Law Enforcement



## Specifications

Product model	TR420	TR430	TR450	TR620	TR630	TR650
<b>Infrared detector</b>						
Detector type	VOx, 8 to 14 $\mu$ m					
Detector resolution	384 $\times$ 288, 12 $\mu$ m			640 $\times$ 480, 12 $\mu$ m		
NETD	$\leq$ 30 mk					
Frame rate	50 Hz					
<b>Lens</b>						
Focal length	25 mm; F1.0	35 mm; F1.0	50 mm; F1.0	25 mm; F1.0	35 mm; F1.0	50 mm; F1.0
Field of angle	10.44° $\times$ 7.87°	7.50° $\times$ 5.64°	5.27° $\times$ 3.95°	17.08° $\times$ 13.03°	12.38° $\times$ 9.38°	8.73° $\times$ 6.60°
Optical zoom	2.9x	4.1x	5.9x	1.8x	2.5x	3.5x
Digital zoom	1x ~ 4x			1x ~ 8x		
Focus	Manual					
<b>Power</b>						
Battery type	Single, replaceable 18650 battery					
Battery life	$\geq$ 8 hours					
<b>Interface</b>						
USB	Type C USB 2.0 for power supply, data transfer, analog video output					
Mechanical interface	Picatinny					
<b>Display</b>						
Display type	0.39" OLED					
Resolution	1024 $\times$ 768					
Eyepiece	Exit pupil distance $\geq$ 48 mm, Diopter $\pm$ 4					
Eyepiece zoom	14x					
Video output	Analog video					
<b>Functions</b>						
Recording function	Photo/Video					
Hot spot tracking	Available					
Rough ranging	Available					
PIP	Upper left, Upper middle, Upper right, Closed, PIP with division line					
Scene modes	Enhanced, Highlight and Natural					
Color palettes	White Hot, Black Hot, Red Hot, Green Hot, Iron Red, Blue Hot					
Compensation modes	Automatic, shutter and scene compensation					
WIFI	Transmission of real-time video via WIFI for remote control in the 2.4G frequency band and within 15 meters					
Zero calibration	50 m / 100 m / 200 m / 300 m / 500 m					
Line type	6 types			10 types		
Other	OTA update					
<b>System</b>						
Language settings	English / Russian / German / French / Italian / Spanish / Japanese / Korean					
Memory capacity	32GB					
<b>Environmental</b>						
Operating temperature	-30°C to 50°C					
Storage temperature	-45°C to 70°C					
Humidity	10 % to 95 % non-condensing					
Shock	800 G at 1 ms half sine pulse (as per IEC60068-2-27)					
Vibration	10 Hz~150 Hz~10 Hz 0.15 mm (as per IEC60068-2-6)					
Drop	1m					
Encapsulation	IP67					
Certification	IP67, FCC, CE, RoHS, EAC, WEEE, UKCA, un38.3					
<b>Detection range</b>						
Detection range	1000 m	1400 m	2000 m	1000 m	1400 m	2000 m
<b>Physical</b>						
Weight	$\leq$ 540 g		$\leq$ 590 g	$\leq$ 540 g		$\leq$ 590 g
Size (L $\times$ W $\times$ H)	202 $\times$ 88 $\times$ 66 mm	208 $\times$ 88 $\times$ 66 mm	219 $\times$ 88 $\times$ 66 mm	202 $\times$ 88 $\times$ 66 mm	208 $\times$ 88 $\times$ 66 mm	219 $\times$ 88 $\times$ 66 mm
Standard	Type C cable, 5V2A adapter (US, Britain, Australia and Europe), 18650 battery, Battery charger, lens cap, eye mask, quick start guide					
Optional	18650 battery, Bluetooth remote control, Type C to USB and AV cable, Laser rangefinder					