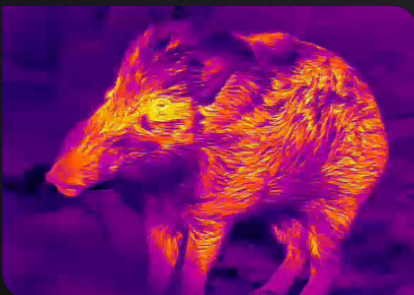# TR Series Thermal Imaging Scope

Enduring Performance, Day and Night

Introduction

TR Series is an economical civilian infrared thermal imaging scope 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 scope also features with compact size, waterproof and dustproof, high shock resistance, rugged and durable, which performs impressively in any harsh weather.

Features and Benefits

o   Fast and easy replaceable 18650 battery for 8 hours of operation

o   1024x768 resolution HD AMOLED display for image detail

o   Support photo and video, record wonderful moments at any time, easy to share

o   Screen freezing for quick and easy zeroing

o   Support device firmware updates by connecting TargetIR APP

o   Get precise 600m laser ranging using an external range finder

o   A wide range of operating temperatures (-30°C to 50°C)

o   IP 67 dustproof and waterproof rated

Applications

o   Outdoor Observing

o   Law Enforcement

Specifications

Product model	TR420	TR430	TR450	TR620	TR630	TR650
Sensor						
Type	Uncooled VOx Infrared Detector, 8 to 14 μm					
Resolution	384×288, 12 μm			640×480, 12 μm		
NETD	≤30mK					
Frame rate	50 Hz					
Lens						
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°×7.87°	7.50°×5.64°	5.27°×3.95°	17.08°×13.03°	12.38°×9.38°	8.73°×6.60°
Optical zoom	2.4x	3.3x	4.7x	1.4x	2.0x	2.8x
Digital zoom	1x ~ 4x			1x ~ 8x		
Focus	Manual					
Display						
Display type	0.39" AMOLED					
Resolution	1024×768					
Eyepiece	Exit pupil distance ≥ 48 mm; Diopter ± 4; Zoom: 14x					
Video output	Analog video					
Range Performance						
Detection range	1000 m	1400 m	2000 m	1000 m	1400 m	2000 m
Functions						
Scene modes	Enhanced, Highlight and Natural					
Color palettes	White Hot, Black Hot, Red Hot, Green Hot, Iron Red, Blue Hot					
Recording function	Photo/Video					
WIFI	2.4G					
Supported Application	TargetIR					
Firmware OTA	Upgrade device firmware via app connection					
Others	PIP, Hot spot tracking, Rough ranging					
Power						
Battery type	Single, replaceable 18650 battery					
Operating time	≥ 8 hours					
Interface						
USB	USB Type-C					
Mechanical interface	Picatinny					
System						
Language settings	English / Russian / German / French / Italian / Spanish / Japanese / Korean					
Memory capacity	32GB					
Environmental						
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)					
Drop	1m					
Encapsulation	IP67					
Certification	IP67, FCC, CE, RoHS, EAC, WEEE, UKCA, un38.3					
Physical						
Weight	≤540 g		≤590 g	≤540 g		≤590 g
Size	202×88×66 mm	208×88×66 mm	219×88×66 mm	202×88×66 mm	208×88×66 mm	219×88×66 mm
Standard	Type C cable, 5V2A adapter (US, Britain, Australia and Europe),18650 battery, Battery charger, lens cap, eye mask, quick start guide, warranty card					
Optional	18650 battery, Dovetail guide, Bluetooth remote control, Laser rangefinder					