

GUIDE

Unlock Hidden Detail with HD AMOLED Display

TU Gen2 Series Thermal Imaging Scope

Introduction

The TU Gen2 Series is equipped with a high-sensitivity thermal sensor of $12\mu\text{m}$ and a 1440×1080 HD AMOLED display. Paired with the robust PureIR image algorithm, it provides users with a more vivid and detailed visual experience. The product has undergone meticulous optimization in its detailed design, elevating user-friendly operation. Furthermore, the battery life has seen a substantial extension, resulting in a 20% increase in duration.

Features

- HD AMOLED display for higher image quality and reduced visual fatigue
- The PureIR algorithm for high-sensitivity thermal images
- Super long battery life of up to 12 hours
- OTA firmware upgrade by connecting to the APP
- Photo and video recording to keep the best moments
- IP67 encapsulation, resistant to 800G shock
- User-friendly improved left-hand operation experience and optimized opening direction of USB cover

Applications

- Night Hunting
- Law Enforcement
- Search & Rescue
- Personal security



Specifications

Product model	TU431	TU451	TU631	TU651
Sensor				
Type	Uncooled VOx Infrared Detector, 8 to 14 μ m			
Resolution	400×300@12 μ m		640×480@12 μ m	
NETD	30mK			
Frame rate	50 Hz			
Lens				
Objective lens	35mm, F1.0	50mm, F1.0	35mm, F1.0	50mm, F1.0
Field of view	7.8°×5.9°	5.5°×4.1°	12.5°×9.4°	8.8°×6.6°
FOV m @100m	14×10	10×7	22×16	15×12
Magnification	2.65x~10.6x	3.78x~15.12x	1.65x~13.2x	2.36x~18.88
Detection range	1800m/ 1950yd	2600m/ 2800yd	1800m/ 1950yd	2600m/ 2800yd
Display				
Display type	0.39" AMOLED 1440×1080			
Color palettes	White Hot, Black Hot, adjustable Red Hot , Green Hot, Iron Red, Blue Hot			
Eyepiece	Exit pupil distance 48 mm; Diopter \pm 4; Zoom: 14x			
Hardware				
WIFI	2.4G			
Interface	USB Type-C; Micro HDMI			
Tube diameter	Standard 30 mm			
System				
Recording function	Photo/Video			
Memory capacity	128GB			
Power				
Battery type	Single 18650 battery (built-in) and customized battery (external)			
Operating time	12 hours			
Environmental				
Operating temp.	-30 $^{\circ}$ C to 50 $^{\circ}$ C/ -22 $^{\circ}$ F to +122 $^{\circ}$ F			
Shock	800 G at 1 ms half sine pulse (as per IEC60068-2-27)			
Encapsulation	IP67			
Physical				
Weight(g/ oz)	990/ 34.92			
Size(mm/ in)	377×107×69/ 14.84×4.21×2.72			
Standard	Device, Lens cover, Eye mask, 5V2A adapter (US, Britain, Australia and Europe), Customized battery×2, Customized battery charger, USB Type-C cable, Micro HDMI cable, Clip×2, Quick start guide, Warranty card			
Optional	Bluetooth remote control, Customized battery, Extended bracket			