

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 14μm			
Resolution	400×300@12μm		640×480@12μm	
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 ± 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 °C to 50 °C / -22°F to +122°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			

* Product performance is based on testing in a controlled laboratory environment. Your test results may vary due to several external and environmental factors. All specifications are subject to the actual product. The manufacturer reserves the right to modify technical specifications without notice or liability to you.