

## TU Gen2 Series

Thermal Imaging Scope

# Unlock Hidden Detail with HD AMOLED Display

outdoor

### Introduction

The TU Gen2 Series is equipped with a high-sensitivity thermal sensor of 12 $\mu$ m and a 1440x1080 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

- o 0.49" AMOLED display for higher image quality and reduced visual fatigue
- o The PureIR algorithm for high-sensitivity thermal images
- o Super long battery life of up to 12 hours
- o Connect mobile APP for OTA firmware upgrade and ballistics calculation
- o Video recording including sound
- o IP67 encapsulation, resistant to 800G shock
- o User-friendly improved left-hand operation experience and optimized opening direction of USB cover

### Applications

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



## Specifications

Product model	TU431	TU451	TU631	TU651
<b>Sensor</b>				
Type	Uncooled VOx Infrared Detector, 8 to 14μm			
Resolution	400×300@12μm		640×512@12μm	
NETD	25mK		20mK	
Frame rate	50 Hz			
<b>Lens</b>				
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°×10.0°	8.8°×7.0°
FOV m@100m	14×10	10×7	22×17	15×12
Magnification	3.3x~13.2x	4.7x~18.9x	2.1x~16.6x	3.0x~23.6x
Detection range	1800m/1950yd	2600m/2800yd	1800m/1950yd	2600m/2800yd
<b>Display</b>				
Display type	0.49" AMOLED 1440×1080			
Color palettes	White Hot, Black Hot, Red Hot, Green Hot, Iron Red, Blue Hot, Sepia			
Eyepiece	Exit pupil distance 48 mm; Diopter ± 4; Zoom: 14x			
<b>Hardware</b>				
WIFI	2.4G			
Interface	USB Type-C; Micro HDMI			
Tube diameter	Standard 30 mm			
Others	Microphone, Bluetooth			
<b>System</b>				
Recording function	Photo/Video (Audio recording included)			
Memory capacity	128GB			
<b>Power</b>				
Battery type	Single 18650 battery (built-in) and customized battery (external)			
Operating time	12 hours			
<b>Environmental</b>				
Operating temp.	-30°C to 50°C / -22°F to +122°F			
Shock	800G at 1ms half sine pulse (as per IEC60068-2-27)			
Encapsulation	IP67			
<b>Physical</b>				
Weight (g/oz)	981/34.60	987/34.82	971/34.25	1000/35.27
Size (mm/in)	368×106×68/14.49×4.17×2.68	381×106×68/15.00×4.17×2.68	368×106×68/14.49×4.17×2.68	381×106×68/15.00×4.17×2.68
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			

\* 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.