

SATIR ORION-33

Thermal Binoculars



The Orion 33 is a cutting-edge thermal imaging binocular equipped with a high-performance 384 × 288 IR detector, delivering exceptional image clarity and detail. This advanced device offers a comprehensive suite of features designed to optimise performance in diverse conditions. Users can effortlessly switch between infrared and visible light channels, fine-tune image quality with adjustable brightness and contrast controls and amplify infrared signals up to 4X for enhanced target detection.

The Orion 33 also provides infrared image polarity conversion (black/white, hot/pseudo-color) for adaptable viewing preferences and includes an auto correction function for image optimisation. Additional features such as manual focus for the infrared lens, OLED brightness and contrast adjustments, a binocular display, and integrated photo and video capture capabilities further enhance the device's versatility. Safety is prioritised with an anti-reverse battery connection.



Key Features

- 384 x 288 IR Detector
- OLED brightness and contrast adjustments
- IP67 Encapsulation
- Binocular Display
- Infrared electronic amplification (1X to 4X, step pitch 0.1)

D300 Specifications

Orion -33	
Model	384 × 288 @17μm
Infrared lens	f=50mm, F1.0
FOV	7.0°× 5.6° (5% Dev) ;
Visible light module	1/3inch;1280 × 960
Visible camera	f=50mm, F2.8
Visible camera FOV	5.0°×3.8° (5% Dev)
Binocular OLED	1024 × 768 0.39inch
Eyepiece dioptre range	±5
Battery type	18650 battery × 3
Storage	64G (Standard capacity)
Video output	PAL Analog video output 50Hz
Power consumption	≤5W
Battery working time	≥5H (15° ~ 35°)
Interface	Electrical: 14-pin (video, USB); Mechanical: 1/4 inch
Weight	≤0.8kg (Battery excluded)
Size(mm)	240mm×140mm×60mm (L x W x H ±5mm deviation each)
Colour	Black
Encapsulation	IP67
Installation	Handheld
Working temperature range	-20° ~ + 55°
Storage temperature range	-40° ~ +70°

D300 Specifications

Vibration	3 axes, scanning frequency 5Hz-55Hz-5Hz, maximum acceleration 5g, each scanning time 5min.
Shock	Two half-sine pulse shocks were applied to the three axes respectively, with a peak acceleration of 20g and a time of 11ms.
Reliability	Host MTBF $\geq 1000h$
Assurance	User manual
Safety	Anti-reverse battery protection Cable sockets and plugs mis-insertion protection