

PRODUCT TECH SHEET



SCAN FOR INFO

MODEL		ORION O435CS - Apex Vision		
STYLE		Thermal Clip-On Scope (<u>no</u> LRF)		
RELEASE	July 2026	RRP	\$1,999	
  No Wi-Fi 				
DIMENSIONS				
LENGTH		99 mm (3.9")		
WIDTH		73 mm (2.9")		
HEIGHT		68 mm (2.7")		
WEIGHT		285g (excl batt)		
PROTECTION				
IP67 (dustproof and water resistant to 1m for 30 mins.)				
POWER				
1 x 18500 Li-ion Battery (external)				

SUMMARY

The **ORION O435CS** is a super-compact thermal clip-on tailored for medium range hunting, bringing precision in silence whilst integrating multiple intelligent features into a lightweight housing weighing ~ all at a tiny 285g!

Now featuring the new 2026 '**Apex Vision**' suite of technologies, including the 6th Generation ApexCore S1 Sensor, Nexus 1.0 Processing Platform and HyperLight 2.0 AI Algorithm for unparalleled definition and clarity, the **O435CS** is a compact, light and capable partner to fix to any existing glass scope when thermal imaging is needed...

The **O435CS** attaches to a glass scope bell housing (*via a connecting clamp purchased separately depending upon the lens size of the scope being fixed to*) and turns a day scope into a thermal powerhouse, featuring G-Zero shutterless technology, an 1800m detection range, 400x300 resolution images at a NETD of <15mk for well-defined clarity out to a 225m shooting distance [depending on target size] ~ and a single, replaceable, rechargeable 18500 battery that delivers a respectable 8 hours of usage under normal conditions!

The **O435CS** delivers a tiny, handy thermal clip-on that can be attached across multiple scopes that offers the premium convenience of thermal imaging without the premium price tag.

KEY FEATURES

- **Thermal Sensor:** 400 x 300 Resolution operating at a NETD of less than 15mK (@25°C), (Pixel Pitch = 12µm.)
- **35mm**, F0.9 Lens for medium-range shooting, with a detection range out to 1800m.
- Wide **Field of View** = 7.9° x 5.9° / 13m x 10m window @ 100m.
- **Magnification** of 1x (*uses glass scope magnification, with up to approx. 15x before pixelation*).
- Backlit **viewing screen** of 0.39 inch; 1024 x 768 resolution AMOLED.
- All-new **Apex Vision** architecture: ApexCore S1 Sensor + Nexus 1.0 Platform + HyperLight 2.0 AI Algorithm.
- **Tiny, Lightweight** design: Only 285g without, and 310g with the external battery.
- **8 hours** approximate run time using one external, 18500 Li-ion battery.
- **IP67** - dustproof and waterproof to 1m for 30 minutes.
- **7 Colour Palettes:** White Hot, Black Hot, Red Hot, Green Hot, Iron Red, Blue Hot, Sepia.
- **6000J Rated:** Handles most hunting calibres including .308, .300 WIN Mag ~ and calibres up to 0.4.

TECHNICAL DETAILS

[3 Year Unit / 10 Year Sensor Warranty]

MAIN:

Max. Resolution	400 x 300
Frame Rate	50 Hz
Pixel Interval	12µm
Response Waveband	8µm to 14µm
Lens (Focal Length)	35mm, F0.9
Min. Focusing Distance	3.5m
Field of View	7.9°×5.9°/13m×10m @ 100m
Magnification	1.0x <i>(the Clip-On uses the Scope Magnification)</i>
Zoom	n/a <i>(the Clip-On uses the Scope Zoom)</i>
Detection Range	1800m <i>(detect a 'shape' at a distance)</i>
Recognition Range	900m <i>(recognise the animal type)</i>
Identification Range	450m <i>(extra detail suitable for accurate identification)</i>



IMAGE DISPLAY:

Display Resolution	1024 x 768
Viewing Screen Size	0.39 inch, AMOLED
Colour Palettes	White Hot, Black Hot, Red Hot, Green Hot, Iron Red, Blue Hot, Sepia
Exit Pupil	6 mm
Eye Relief	20 mm
Diopter (Range)	n/a
Brightness Adjustment	Yes
Contrast Adjustment	Yes
Tone Adjustment	Cold, Warm
Software Platform - Nexus 1.0	Yes <i>(faster processing of data for quicker image response)</i>
AI Algoritm - HyperLight 2.0	Yes <i>(seamless blending of background imagery)</i>

GENERAL:

Protection Level	IP67 <i>(dustproof, waterproof to 1m for 30 minutes)</i>
Weight	285g <i>(without battery);</i> 310g <i>[with battery installed]</i>
Dimension	99 mm x 73 mm x 68 mm (3.9" x 2.9" x 2.7")
Working Temperature	From -20°C to +50°C (-4°F to +122°F);
Working Humidity	90% or Less

SYSTEM:

Audio Recording	No
Capture Snapshot	No
Record Video	No
Record Video Resolution	n/a
Hotspot	Yes
Standby Mode	Yes
Storage	No
PIP (Picture-in-Picture)	Yes
Hot Spot Wi-Fi	No
Hotspot 2.4 GHz/5 GHz Wi-Fi	n/a
Hot Track	Yes
Burn Prevention	Yes
Distance Measurement	Stadiametric Rangefinder Only - No LRF
Local Album	No
File Download	Download to PC using USB-C Cable (provided), or via TargetIR App

POWER:

Battery Type	1 x external 18500 Lithium-ion Battery
Battery Run Time (Hot Spot Wi-Fi <u>Off</u>)	8 hours of Continuous Running (@25°C)
Power Supply	5V 2A Twin-Battery Charger with USB Cable for AC Charging

WHAT'S IN THE BOX:

O435CS Device; Carry Bag; Accessory Bag; Lint-Free Cloth; Twin Battery Charger; 18500 Battery ×2; USB-A to USB-C Cable; Quick Start Guide; Warranty Card.