



Experience **NOCTIS**.  
Conquer darkness.

**Puma**  
Fused Night Vision Device

**THE FUTURE OF  
NIGHT VISION**

**Thermal Weapon Sight**

Thermal  
Obscured Detection  
LWIR 320 x 240

**Low Light Digital Camera**

CMOS Low Light  
Day/Night Capable  
1080p

**Unmatched Capability**

Fusion  
Best of Both Worlds  
Advanced Image  
Processing



Object distance > 950m.



## PUMA SPECS

SENSORS AND DISPLAY	
Sensor	Low Light Visible
Sensor	Thermal, LWIR
Display	Color AMOLED
System Magnification	~2X
Digital	~2X - 16X
VISIBLE/LOW LIGHT SENSOR	
Sensor	IMX290
Pixel	2.9um CMOS BSI
Array Format	1920x1080
OPTICS	
Focal Length	16mm
f/#	1.6
Max Field of View (H, V, D)	19.9° x 11.2°, 22.9°
Effective Range	400 yards
Focus	Fixed, 10m - Inf
IR Cut Filter	Optional, External
THERMAL SENSOR	
Sensor	Thermal
Pixel	12um
Array Format	320x240
OPTICS	
Focal Length	19mm
f/#	1.1
Max Field of View (H, V, D)	11.6° x 8.7°, 15.4°
Effective Range	120 yards
Focus	Fixed, 10m - Inf
DISPLAY	
Display	AMOLED, Round, 454 pixel Diameter
Pixel	Color AMOLED
Array Size	1.39 in
Array Format	Round 454x454
Luminance	300 Cd/m <sup>2</sup>
Contrast Ratio	100,000:1

OPTICS	
Focal Length	45mm
Field of View (H, V, D)	44.5°
Eyebox	> 5mm
Eye Relief	~30mm
IMAGE PROCESSOR	
Processor	Arm 4x Cortex A7 @ 1.5GHz + Dual ISP Pipelines
Storage	eMMC 8/16/64GB
E-Zoom	1x-10x, 2x-16x
Gain Control	Auto
Video Codec	H.264
Image Codec	JPEG
USB	Mass Storage USB2.0 Software Updates
Wireless & App (Optional)	Wifi + BT; Video/Photo Share, Software Updates, Ballistic Computer Integration;
USER INTERFACE	
Boresight Adjustment	Sensor to sensor and global to reticle
Reticles	Cross, Mil dot, Custom
Status	Low Battery Indicator, Memory Usage, +TBD
Controls	Blend Ratio, Digital Zoom, Image Capture, Video Recording, Brightness, Thermal Colors, Customization
ENVIRONMENTAL	
Operating Temperature	-20C to +70C
Storage Temperature	-40C to +85C
Shock/Impact	5.56mm, .308 caliber
Regulatory	EMI/EMC/Safety
OTHER	
Start Up Time	< 5s
Battery Life, 2x 18650 (3500mAh)	8 hr typical
External Power	USB 5 V
Battery Life, 2x CR123(optional)	3hr typical