



**THERMAL-EYE™**

## A safer world

Thermal imaging systems are designed and manufactured by Raytheon Infrared for applications in public safety, fire and rescue, industrial, security and transportation. Having pioneered infrared technology decades ago, our products continue to increase the safety of our neighborhoods, help rescue victims of accidents, monitor business facilities and assets and improve the safety of nighttime driving. In fact, with so many positive applications, in so many areas of life, Raytheon Infrared keeps us all just a little bit safer. And when you stop to think about it, can any of us afford anything less?

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**THERMAL-EYE™**

**X100<sub>XP</sub>**

The Thermal-Eye X100<sub>XP</sub> is a revolutionary thermal imaging camera designed for public safety departments, law enforcement professionals and military use. Setting the standard for durability and compactness in thermal imaging cameras, the X100<sub>XP</sub> is an ideal addition to any department's arsenal and has been battle-tested in Operation Iraqi Freedom. The affordable Thermal-Eye X100<sub>XP</sub> gives users the ability to see in complete darkness whether on a routine patrol, locating a lost child or tracking a fugitive. Developed with Raytheon's advanced amorphous silicon microbolometer detector, the X100<sub>XP</sub> delivers the ultimate in true infrared technology, as no lighting is required.



- Fugitive search and pursuit
- Routine patrols
- Hidden compartment detection
- Asset protection
- Search and rescue
- Crime scene investigation

The Thermal-Eye X100<sub>XP</sub> thermal imaging camera sets the standard for durability and compactness in portable infrared cameras. Weighing in at only 13 ounces with its unique design, the X100<sub>XP</sub> operates simply with one-button on/off operation. Designed for the rigors of outdoor use, it features a rubberized slip-resistant casing and can withstand shock and vibration. This handheld, pocket-sized innovation also exceeds waterproof standards and conveniently operates on standard AA batteries. Other features include a protective lens cap, tripod mount for stationary use and camera strap for the officer on the go.

### Benefits

- Provide an officer the ultimate safety and security solution
- Afford officers the ability to track fugitives without exposing themselves to unnecessary danger
- Monitor suspects without their knowledge, day or night
- Provide an incredibly clear picture of the surrounding scene, up to 1000 feet, through the use of superior imaging software
- Easily spot a fugitive hiding in thick foliage or under a vehicle

**Without Thermal-Eye**



**With Thermal-Eye**



**See the Unseen™**

**Raytheon**



**THERMAL-EYE™**

<b>Thermal-Eye™ X100<sub>XP</sub></b>	
Material & Structure	Amorphous Silicon Microbolometer
Pixel Count	160 x 120
Spectral Response	7-14 $\mu\text{m}$ (filter bandwidth)
Thermal Sensitivity	$\leq 100$ mK
Start-up Time	~ 5 sec
Brightness/Contrast	Fully automatic
Range to Detect Human Activity	Up to 1000 Feet (305 meters)
Susceptibility to blinding visible light	None
Infrared Polarity	White Hot-Black Cold
FOV (H x V)	17° x 12°
Focal Length, mm	25 mm
Minimum Focus Distance	~ 3ft. (1 meter)
Output Format	Analog: SMPTE-170 (cf. NTSC monochrome) on rear outlet jack
Viewfinder Display	Monochrome LCD (320x240 pixels)
Viewfinder Dimming	Integral to power on/off switch
Power Source	2 AA batteries
Operating Time	~ 3 Hours with alkaline ~7 Hours with lithium [77°F (25°C), night-time operation]
Auxiliary Power	9 to 12 VDC input on rear outlet jack
Operating Temperature	-4°F to 140°F (-20°C to 60°C)
Storage Temperature	-4°F to 176°F (-20°C to 80°C)
Water Resistance	Waterproof to 9ft (3m) submersion, buoyant in fresh water
EMC Compliance	FCC Part 15 & CE Mark
Size	5 1/4" L x 4 1/2" W x 2" H (13.4 x 11.4 x 5.1 cm)
Weight	13 oz (381g), batteries installed
Eye Cup	Integral to camera body with 2" eye relief
Camera Part Number	6302-2
	<ul style="list-style-type: none"> <li>• Enhanced DSP image processing</li> <li>• On-screen battery level indicator</li> <li>• Left or right hand operation with rugged slip resistant grip</li> <li>• Tactile battery loading feature for stealth night-time operation</li> <li>• Sealed cover for enclosing external video and power jacks</li> <li>• Long eye-relief viewfinder for use with glasses, face shield, masks, etc.</li> <li>• 1/4-20 tripod mount</li> </ul>
	<ul style="list-style-type: none"> <li>• Soft protective case</li> <li>• 2 AA alkaline batteries</li> <li>• Neck strap &amp; Wrist strap</li> <li>• Lens Cover</li> <li>• Lens cleaning cloth</li> </ul>
All specifications are subject to change without notice	
RAYTHEON X100 <sub>XP</sub> Rev E	