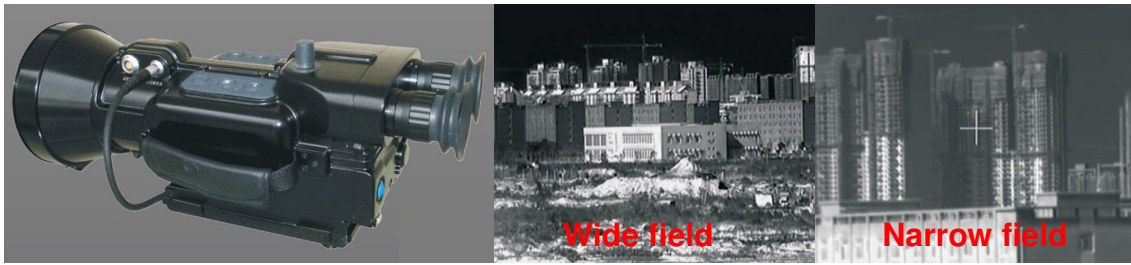


# armstrong optical

## IR300D Cooled Binocular Thermal Viewer



The **IR300D** binocular thermal viewer is a 3<sup>rd</sup> generation cooled FPA system incorporating a multiplicity of functions. Based around a cooled 3 - 5 $\mu$ m sensor and a dual field of view lens with motorised focus the **IR300D** can be utilised in either a fixed position or is light enough to be handheld.

Add-on options for the standard **IR300D** include a **GPS** system, a digital magnetic compass (**IR300A**) and a laser rangefinder (**IR300S**) enabling the system to be customised for a wide variety of applications. Incorporation of these extras converts the **IR300D** into a fully featured range targeting system. In near field mode (NFOV) the detection range (50%) for a vehicle (2.3m) is >5km.

### Thermal Imager

Detector type	Cooled HgCdTe FPA
Spectral range	3 - 5 $\mu$ m
Sensor size	320x256 pixel, 30 $\mu$ m
NETD	$\leq$ 15mK at 25 $^{\circ}$ C
Cooling	Stirling, <8min

### Optics

Focal length/ f#	motorised 75/300mm f/3.1
Field of view	WFOV 7.3 $^{\circ}$ x 5.5 $^{\circ}$ NFOV 1.8 $^{\circ}$ x 1.4 $^{\circ}$

### Image presentation

Video output	PAL, 50Hz, RCA/BNC
Brightness/contrast	Auto/manual
Polarity	White hot/ black hot
Electronic zoom	X2
Display	OLED dual viewfinder

### Power

Power supply	220V AC
Power consumption	<25W at 25 $^{\circ}$ C
Battery operating time	3hrs
Interfaces	RS232

### GPS

Position precision	<3m
Real-time refresh	20Hz

### Digital magnetic compass

Heading precision	$\pm$ 0.5 $^{\circ}$
Inclination precision	$\pm$ 0.2 $^{\circ}$
Inclination range	$\pm$ 50 $^{\circ}$

### Laser rangefinder

Ranging performance	50 ~ 5000m
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### Environmental specification

Ranging accuracy	$\pm$ 3m	Operating temperature	-40 $^{\circ}$ C to +60 $^{\circ}$ C
Wavelength	1.064 $\mu$ m	Storage temperature	-40 $^{\circ}$ C to +60 $^{\circ}$ C
Beam divergence	$\leq$ 1.0mrad	Encapsulation	IP67

### Physical

Size	410 x 158 x 155mm
Weight	2.75kg (w/o battery)
Colour	Black