

TR4700 Series Long-Range Cooled Thermal Camera



The TR4700 series cameras are high performance thermal imagers optimized for long range surveillance and tracking in mobile systems or field installations.

The system uses the third generation of high quantum effective 640x512 pixels 15 μ m pitch InSb focal plane arrays, operating in the 3-5 μ m waverband, in full snap shot mode.

The cameras incorporate a sensitive InSb focal plane array sensor, state-of-the-art 14-bit digital electronics and motorized optics, in a compact and weather proof enclosure.



Key Features

- Spatial Resolution 640x512 Pixels 15 μ m Pitch FPA
- Integral Long Life Stirling Cooler
- Continuous Zoom Optics
- Communication Control via RS-232 or RS-422
- Nitrogen-Purged & Pressurized Enclosure

Applications

This unique combination of night vision power is Cantronic's solution to the increase need for security and homeland protection at a board range of facilities and infrastructure such as:

- Bridges; Airports; Seaports; Subways
- Military Facilities
- Perimeter Security
- Nuclear Power Plants
- Government Facilities
- Industrial Applications

Performance Options

- Auto Focus and FOV Control for Multi FOV Camera
- Pan-Tilt Drive

TR4700 Series Long-Range Cooled Thermal Camera

Specifications

Model	TR4700-C600	TR4700-C825	TR4700-C1150
Lens Focal Length	30 - 600mm	38 - 825mm	58 - 1150mm
Field of View, Wide (H x V)	18.2° x 14.6°	14.4° x 11.5°	9.5° x 7.6°
Field of View, Narrow (H x V)	0.9° x 0.7°	0.7° x 0.5°	0.5° x 0.4°
F Number		F / 4	
Optics (Motorized)		Continuous Zoom with Preset Function	
Detector Type		InSb, 640 x 512 Pixels, 15µm Pitch	
Spectral Range		3 - 5 µm	
Cooling		Stirling Cooler	
NETD		< 20mK	
Image Mode		Snap Shot	
Focus Method		Auto & Manual Focus	
Digital Zoom		2X / 4X	
System Control		RS232 or RS422	
Analog Video Output (Frame Rate)		NTSC (30Hz) or PAL (25Hz)	
Operating Temperature		-32° to +55°	
Storage Temperature		-40° to +70°	
Relative Humidity		< 90%	
Environmental		IP66 Pressurized Enclosure, MIL-STD-810E	
MTBF		> 8000 Hours	
Power Input		12VDC and 24VDC, <35W	
Camera Weight, Approx.	12kg	13kg	15kg
Dimensions (H xW xL)	286 x 238 x 569mm	326 x 278 x 609mm	350 x 300 x 688mm

Range Performance

Model	TR4700-C600		TR4700-C825		TR4700-C1150	
	<u>Human</u>	<u>NATO</u>	<u>Human</u>	<u>NATO</u>	<u>Human</u>	<u>NATO</u>
Target Detection	15.8km	18.4km	16.3km	20km	17.1km	21.8km
Recognition	6.3km	15.3km	8.6km	17.6km	11.4km	19.5km
Identification	3.1km	7.6km	4.3km	10.5km	5.8km	13.9km

* Target size: Human 1.8m x 0.5m and NATO 2.3m x 2.3m.
 * Range performances are approximately calculated for reference only.

How to Order

TR4700-C600 N

Lens

Video Output

C600: 30-600mm Zoom Lens
 C825: 38-825mm Zoom Lens
 C1150: 58-1150mm Zoom Lens

N: NTSC
 P: PAL

Cantronic Systems Inc.

67A Clipper Street
 Coquitlam, BC V3K 6X2, Canada
 Tel: 1.604.516.6667
 Toll Free: 1.866.391.6970
 Fax: 1.604.516.6618
 Email: sales@cantronics.com
 Website: www.cantronics.com