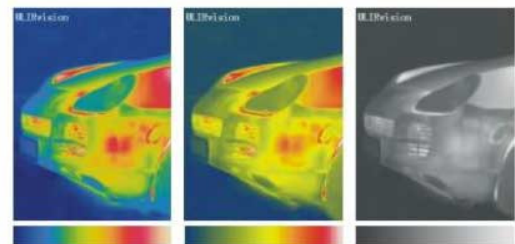


## Features

- Compact, lightweight package for easy integration.
- 50Hz frame rate for real time, crisp thermal images.
- Video output in black & white or color palettes.
- Multi-interface for easily embedded application.
- 2x digital zoom enables users to see objects details.
- RS232 interface offers access to remote control on PC.
- Advanced image processing function presents excellent thermal image video.
- Professional analysis software enable customers to create their own applications.

### Color Palette Mode



### Lens Data



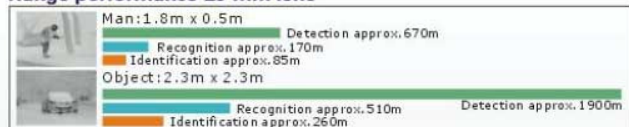
	4.7mm	11mm	15mm	28mm	40mm	75mm
<b>Field of View</b>						
<b>TC160</b>	50° x 37°	21° x 16°	15° x 12°	8.5° x 6°	6° x 5°	N/A
<b>TC384</b>	N/A	50° x 38°	36° x 27°	20° x 15°	14° x 11°	7° x 5°
<b>Spatial resolution(IFOV)</b>	5.32mrad	2.27mrad	1.68mrad	0.89mrad	0.63mrad	0.33mrad
<b>Minimum focus distance</b>	0.13m	0.13m	0.3m	0.7m	1.8m	4.5m
<b>f/ number</b>	1	1	1	1	1	1
<b>Weight</b>	45g	44g	33g	145g	257g	500g
<b>Length(lens only)</b>	16mm	28mm	15mm	34mm	62mm	97mm
<b>Diameter (maximum)</b>	35mm	34mm	37mm	50mm	56mm	86mm
<b>Lens Coating Type</b>	High Efficiency					

Note:Lenses are not interchangeable. Lens must be specified at time of order

#### Range performance 4.7 mm lens



#### Range performance 28 mm lens



#### Range performance 11 mm lens



#### Range performance 40 mm lens



#### Range performance 15 mm lens



#### Range performance 75 mm lens



## Technical Specifications

Item	TC160	TC384
<b>Detector Data</b>		
- Detector Type	Focal plane array (FPA), uncooled microbolometer	Focal plane array (FPA), uncooled microbolometer
- IR resolution	160 x 120 pixels	384 x 288 pixels
- Pixel pitch	25 μm	25 μm
- Spectral range	8~14 μm	8~14 μm
- Thermal sensitivity(NETD)	<65mk	<65mk
<b>Image Presentation</b>		
- Focus	Factory-set at infinity focus, lens thread mount allows focus adjustment	Factory-set at infinity focus, lens thread mount allows focus adjustment
- Frequency	50/60Hz	50/60Hz
- Electronic zoom	2x	2x
- Polarity/LUT	Black hot / White hot	Black hot / White hot
- Image processing	Advanced image improvement	Advanced image improvement
- Brightness/Contrast	Auto/Manual	Auto/Manual
- Video color	Color palette or black &white	Color palette or black &white
- Analog video output	BNC interface NTSC or PAL composite video(video format must be specified at time of order)	BNC interface NTSC or PAL composite video(video format must be specified at time of order)
- Digital video output	16-bit serial LVDS data stream	16-bit serial LVDS data stream
<b>Power System</b>		
- Voltage	8~24V	8~24V
- Consumption	<2.2W steady state	<2.2W steady state
<b>Environment Data</b>		
- Operating temperature	-20°C~50°C	-20°C~50°C
- Storage temperature	-40°C~70°C	-40°C~70°C
- Humidity	Non-condensing, 5% to 95%	Non-condensing, 5% to 95%
- Shock	70g shock pulse with a 11ms half-sine profile	70g shock pulse with a 11ms half-sine profile
- Vibration	4.3g rms random vibration for 8hours (three axes)	4.3g rms random vibration for 8hours (three axes)
<b>Physical Data</b>		
- Weight (w/o lens)	<142g( with cover)	<142g( with cover)
- Size (w/o lens)	48.5 x 49 x 50mm	48.5 x 49 x 50mm
<b>Interfaces</b>		
- External DC input	Yes	Yes
- Analog video output	PAL/NTSC	PAL/NTSC
- Digital video output	16-bit serial LVDS	16-bit serial LVDS
- Serial ports	RS232	RS232
- Mounting	M3, 1/4"-20	M3, 1/4"-20
<b>Packing includes</b>		
- Standard	Thermal imaging core, serial Interface cable, Video cable, Adapter, software CD, manual, warranty card	Thermal imaging core, serial Interface cable, Video cable, Adapter, software CD, manual, warranty card
- Option	Infrared lens	Infrared lens

## Multifunctional Analysis Software

