

# **Capital Services System**

# **Extremely Long Range Monitoring Infrared Thermal Camera**

- Extremely Long Range Action
- All-round Remote Control Function
- · Hermetically sealed housing
- Optional silicon protecting window
- Auto-adjusted air and land detection mode ensures good image quality in any harsh environment, especially in desert and hash temperature
- Intensifies information captured from long range flight target and tiny object

As extremely long range monitoring infrared thermal camera, IR 136 features more unique and professional technologies. Integrating with high sensitivity mid wave detector and 240/60mm optics, it tracks aircraft more than 200km away. Dual field of view and electronic zoom enables early situation awareness and fast target recognition. With indurative metallic housing and optional silicon protecting window, IR 136 can be used in any harsh environment.





All-round Remote Control function by external keyboard, Including remote control of lens cap (open/close), focus, FOV, brightness and contrast of image, image intensification, image electronic zoom in, image polarity, calibration etc.



## Technical Specifications IR 136

Imaging Performance	
Detector Material:	HgCdTe
Pixels:	320 X 256 pixels
Pixel Pitch:	30 µm
Spectrum Range:	3 ~ 5 μm
Cooled method:	Stirling Cooler
NETD:	< 15 mK @ 25°C
Lens:	240/60mm / F # =2
Field of View:	2.3° X 1.7° (NFOV)
	9.1° X 6.9° (WFOV)
Image Presentation	
Video Output:	CCIR 625 lines/50Hz, Analog PAL 1 .0 VPP 75Ω
Image Color:	256 level gray, B&W, B&W inverse
Integrated Display:	Auto/Manual brightness and contrast
	Auto-adjusted sky & ground detection mode
	Intensify information of long-range tiny object
	Nonlinear correction no, "ghost"
	Auto/Manual NUC (non-uniformity caliberation)
	Bad Pixel correction
	Image Polarity, image enhancement, 2 X electronic zoom
Interface	
Remote Control:	RS422 & RS232
Power Consumption	
Power for Cooling:	When Cooling ≤ 26W @ 20°C
	When Stable $\leq 24W @ 20^{\circ}C$
Environmental	
Operating Temperature:	-20°C ~ +60°C (-40°C ~ +60°C optional)
Storage Temperature:	-55°C ~ +60°C
Shock:	Conformity with GJB 150-86
Vibration:	Conformity with GJB 150-86
Electromagnetism Compatible:	Conformity with GJB 151A-97
Physical Characteristics	
Weight:	11.0 Kg
Size:	439.5mm X 144.6mm X 172mm

#### **Head Office**

No.27, 1st Floor, AL-Baber Centre Markaz F-8, Islamabad, Pakistan Tel: +92 51 2855627, 2856534 Fax: +92 51 2855629

#### Lahore Office

Mota Singh, 1 Km Off Bedian Rd Near Elite Force Training Centre Lahore Cantt. Pakistan Tel: +92 42 5031919

#### China Office

A 616, Yingban Commercial Building 129 Nan Xiao Jie, Shijia Zhuang Hebei, P.R. China Tel: + 86 13619985772

info@csspakistan.com



# **Capital Services System**

# **Additional Information: IR 136**

### **Extremely long-range action**

With 3rd generation cooled FPA detector and unique processing electronics, IR136 can detect airplanes from distance of more than 200km.

### All-round remote control function

All-round Remote Control function by external keyboard, including remote control of lens cap (open/close), focus, FOV, brightness and contrast of image, image intensification, image electronic zoom in, image polarity, calibration and etc.

### Hermetically sealed housing with military standard

Hermetically sealed & military standard housing with gas-filled in chamber protects any damage from moisture, rain, chemical corrosion, smoke and dust, impurity and sand. It also ensures no rotary or movable parts in camera.

### Silicon protecting window

It Strengthens protection the valuable lens avoid damage from rain, sand, dust and etc.

#### Auto compensation

Correction and compensation of the camera can be done by built-in shutter. No extra work needed for calibration, such as covering the lens cap or finding clean and cloud-free sky

#### Auto-adjusted sky & ground detection mode

- It ensures good image quality in any harsh environment, especially desert or high temperature area
- When detecting high altitude, low altitude or earth with high temperature simultaneously, in order to keep high thermal sensitivity, ordinary infrared camera will saturate high temperature part and end low temperature part. In this way, object in high temperature area of low altitude and low temperature area of high altitude can not be detected. It is really dangerous.
- Auto-adjusted sky & ground detection mode enables soldiers see any object within any temperature area under any of above described conditions simultaneously.
- This mode is extremely important for long-range monitoring infrared thermal camera.

#### Intensify the information captured from long-range flight target and tiny object

- The function can auto-extract and intensify information from long-range tiny object.
- It ensures clearer observation for the object which is difficult to distinguish by naked eye and certainly extended detection range.
- It is extremely important for long-range monitoring infrared thermal camera.

#### **Head Office** No.27, 1st Floor, AL-Baber Centre Markaz F-8, Islamabad, Pakistan Tel: +92 51 2855627, 2856534 Fax: +92 51 2855629

#### Lahore Office Mota Singh, 1 Km Off Bedian Rd Near Elite Force Training Centre Lahore Cantt. Pakistan Tel: +92 42 5031919

#### info@csspakistan.com

China Office A 616, Yingban Commercial Building 129 Nan Xiao Jie, Shijia Zhuang Hebei, P.R. China Tel: + 86 13619985772