IRSS-I-3
Passive Infrared Search Systems

Today, active defense systems and electromagnetic radars are detectable and attacked by jammers. IRSS-I 3 is a passive Infrared Search system to detect planes, missiles and helicopters.Mission of this system is detection of flying targets without sending electromagnetic waves, which makes it difficult to be detected by enemies. The system searches for flying objects then reports its position to control panel.

FEATURES

- Passive detection of flying objects.
- High rotation rate : 360º/s
- Sending azimuth and elevation coordinates to firing control systems.
- Day/Night operation.
- Electromagnetic jamming resistance.
- Installable on high towers
- Panoramic image display (360º view)
- Horizontal searching view: 360º
- Vertical searching view: 13.5º
- Connection to a Weapon Control Chain
- Detection range in the normal atmosphere:
- Cruise missiles 15 km
- Helicopter 20 km
- Fighter 40 km

TECHNICAL SPECIFICATIONS

IR Camera	
Spectral Range	8 µm ~ 12 µm
Detector	Cooled MCT 4×288 pixels
NETD	<100 mK
Lens focal length	70 / 200 mm
Field of View	3×2.25° or 9×6.75°
Operation temperature	-30°C ~ +55°C
Platform	
Pan rotation range	n×360°
Tilt rotation range	-10° ~ +80°
Pan rotation rate	Max 360°/s
Tilt rotation rate	Max 90°/s
Platform position measuring accuracy	0.01°
Communication	Fiber Optic
Operation temperature	-20°C ~ +60°C
Humidity	95%
Weight	340 Kg with stand and 230 Kg without stand
Laser Range Finder	
Wavelength	1.064 micrometer
Energy	120 mj
Operating Range	1Km ~ 20Km
Accuracy	± 5m
Frequency	1~12.5 Hz
Operating Temperature	-20°C ~ +50°C
Storage Temperature	-30°C ~ +55°C
Relative Humidity	95%
Protocol	RS422