Sii FG

The **Sii FG** Fog Vision System provides fused multi-spectral (MWIR & SWIR), high-resolution, day and thermal vision capabilities, for conditions of severely reduced visibility. These images, which are normally undetectable to the naked eye at night, or to MWIR or LWIR thermal cameras in bad weather, are easily detectable with the highly sensitive, cooled Sii FG camera, providing the visual information necessary for all kinds of operations. Sii FG uses advanced algorithms to deliver increased situational awareness in extreme bad weather such as thick fog, smog, heavy rain, high humidity, and snow, providing clear images of train tracks, landscapes, runways, obstructions, and people, with an option for extreme long range capabilities, and multiple fields of view, in the worst kinds of weather.

FEATURES

KEY FEATURES

- **Multi-Spectral SWIR + MWIR**
  Use fused multi-spectral setting, or switch between MWIR and SWIR.

- **Highly Sensitive IR Sensor**
  NETD less than 0.005°C.

- **Powerful Electronic Processor**

- **Very High Dynamic Range**
  Clear images of scenes at different extreme temperatures.

- **Proprietary Image-Processing Algorithms**

- **High Acquisition Rate**
  Up to 300 frames/second.

- **Anti-Blooming Mechanism**
  Cancels interference from irrelevant sources of light and/or heat.

KEY BENEFITS

- **Dense Fog Penetration**
  High accuracy in extreme bad weather.

- **Unprecedented Situational Awareness**
  Enhances safety in low visibility.

- **Detailed Human Detection**
  Up to 10km in all weather conditions.

- **Long-Range Capabilities**
  See enviromental features in low visibility.

- **Only Camera of Its Kind**
  Lowest weight and size camera vs. market.

- **Unparalleled Support**

- **Simple To Use**

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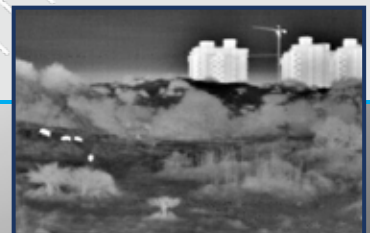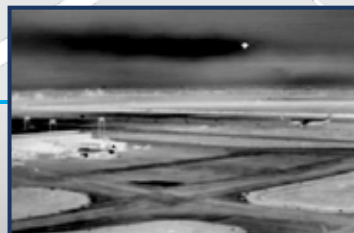
APPLICATIONS

- **Long-Range Target Detection**
- **Airborne Observation and Reconnaisance**
- **Gun Flash Detection**
- **Long-Range Detection in High Humidity Seaports**

- **Improved Railway Safety**
- **Wide Area Motion Imagery**
- **Virtual Control Towers**
- **Border Smuggling Detection**

Features	Sii FG - 16	Sii FG - 100	Sii FG - 350
Spectral Range	1µ to 5µ		
Acquisition Frame Rate	300 frames/second		
NETD	<0.005°C		
Dynamic Range	>60dB		
Dewar Detector Cooler (DDC) Type	InSb 640 x 512 element FPA 15µ		XBN 1280 x 1024 FPA 10µ
Field of View	34°H x 27°V	5.5°H x 4.1°V	3.1°H x 2.4°V (NFOV)
Lens Focal Length	16mm; F#1.5	100mm; F#1.5	30/150/350mm; F#1.5
Lens Design	Fixed, Athermal	Fixed, Athermal	Motorized, Autofocus
Number of FOV's	Single FOV	Single FOV	3 FOV's
Non-Uniformity Correction (NUC)	0.03% Including bad pixel correction		
Output Video	Processed digital 8 bits over Ethernet/ HD-SDI SMPTE 292M /GIGE 32-bit raw data over Ethernet		
Command and Control	TCP/IP or 4 wire RS-485		
Power Supply	28VDC, 45W w/o heaters (150W with heaters)		
Operating Temperature	-40°C to +60°C		
Storage Temperature	-46°C to +71°C		
MTBF	>8,000 hours	>8,000 hours	>20,000 hours
Weight (without tripod)	~8kg	~9kg	~12kg

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