

NEW

NEC

Solution for Surveillance and measurement by new added value!

Infrared Sensor Modules

Making use of the uncooled infrared sensor with crisp image and small pixel pitch.

PALMTOP light and small module is easy to be built up in devices and system.

Sensor Module HX0830M1

320x240 pixel sensor equipped



HX3100F0

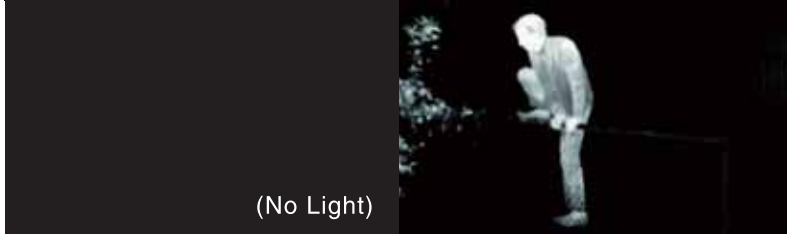
640x480 pixel sensor equipped



Fire fighting



Security (Intruder)



Surveillance in sea areas



Driver's Vision Enhancement



Customizable according to various needs.



NEC Avio Infrared Technologies Co., Ltd.

■ Infrared sensor module (HX0830M1, HX3100F0) Specifications

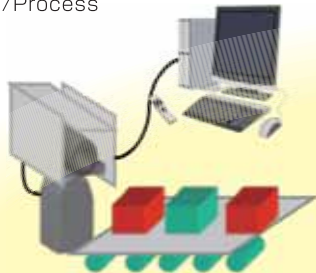
Type	HX0830M1	HX3100F0
Detector	Uncooled focal plane array	
Number of Pixels	320 (H) × 240 (V)	640 (H) × 480 (V)
Pitch of detector	23.5μm	
Spectral range	8~14μm	
Minimum detectable temperature difference (With F/1 lens)	L range : <75mk / H range : < 300mk	
Sensor frame rate	60Hz	30Hz
Video frame rate	30Hz(NTSC), 25Hz(PAL)	
Range	L, H(2range)	
Dynamic range	L range : -40°C~150°C / H range : 0°C~540°C	
Lens (Reference)	f=8mm, F/1	f=50mm, F/1
Focal length	50cm~∞	1m~∞
Power supply	DC5~15V	DC12V(±10%)
Power consumption	< 5W	Approx. 7W
Image output	Composite Video (NTSC/PAL)	
Digital output	ITU-R, BT656 video data/ RAW data	
General purpose interface	RS-232C	
Controllable function	Contrast/ Brightness/ Monochrome reversing/ Digital zoom/ Range change/ FPN correction (Auto/Manual)	
Dimensions (mm)	38 (W) × 38 (H) × 65 (D)	82 (W) × 85 (H) × 75 (D)
Weight (Excluding lens)	150g	370g
Operating temperature	-30°C~60°C	

■ Infrared sensor module (HX0830M1, HX3100F0) Options

Type	HX0830M1	HX3100F0
f=8mm lens (F/1)	IFOV : 2.94mrad FOV : 50° (H) × 37.5° (V) Focus range : 50cm ~ ∞	—
f=14mm lens (F/1)	IFOV : 1.68mrad FOV : 30° (H) × 22.8° (V) Focus range : 50cm ~ ∞	—
f=25mm lens (F/1)	IFOV : 0.94mrad FOV : 17.1° (H) × 12.9° (V) Focus range : 1m ~ ∞	—
f=35mm lens (F/1)	IFOV : 0.67mrad FOV : 12.3° (H) × 9.2° (V) Focus range : 2m ~ ∞	—
f=39mm lens (F/1)	—	IFOV : 0.60mrad FOV : 21.7° (H) × 16.4° (V) Focus range : 1m ~ ∞
f=50mm lens (F/1)	IFOV : 0.47mrad FOV : 8.6° (H) × 6.5° (V) Focus range : 3m ~ ∞	—

System configuration examples

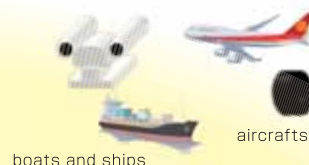
FA/Process



Security/Surveillance



Enhanced Vision Systems



Intelligent Traffic System



Fire Fighting/ Rescue



Biometrics



CAUTION FOR SAFETY

- Please read "WARNING" & "CAUTION" in the operation manual attached to the product carefully for proper operation before using the product.
- Infrared sensor module is controlled by the export law. When you reexport this product from your country, the export license of your country is required.

NEC Avio Infrared Technologies Co., Ltd.

1-5, Nishi-Gotanda 8-chome, Shinagawa-ku,
Tokyo 141-8535, Japan
Phone: +81-3-5436-1373
Fax : +81-3-5436-1618
E-mail: osd@nec-avio.co.jp
Web : http://www.nec-avio.co.jp/en/

Distributor:



Catalog ref : NA017

C0810A5 Printed in Japan