

THERMAL EXPERT™

Uncooled Infrared Engine

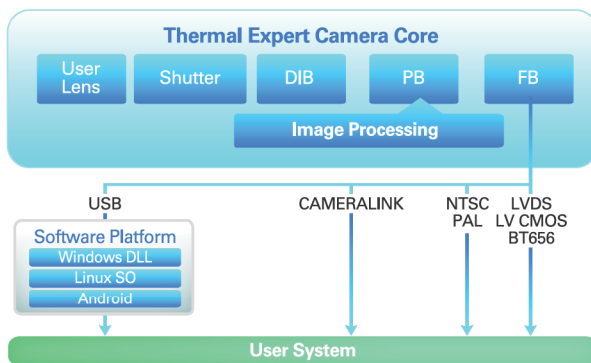
TE-EX2/EV2/EQ2

Description

TE-EX2/EV2/EQ2 is an infrared camera system which integrates a long-wave infrared(LWIR) micro bolometer, shutter, signal processing electronics(DIB, PB, FB) and selectable lenses.

Components

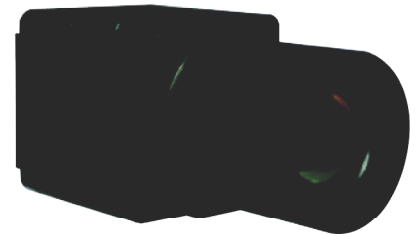
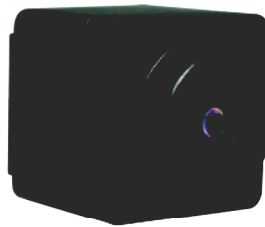
- DIB(Detector Interface Board) : A/D converting of Detector data.
- PB(Process Board) : Detector control and image processing.
- FB(Feature Board) : Output board.
 - USB output mode
 - Camera Link output mode
 - LV CMOS or BT656 output mode
 - NTSC or PAL output mode



TE-EQ2(Module)

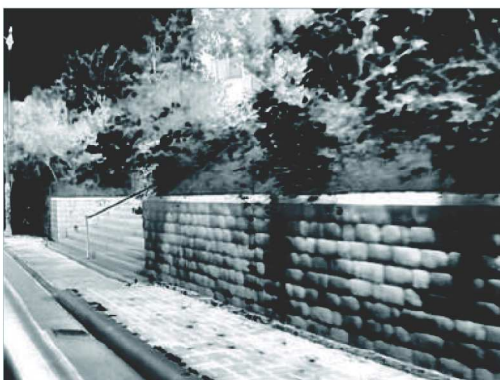


TE-EX/EV2(Module)



* Including lens

Images from Thermal Expert Engine



SEE THE NEW WORLD THROUGH i3system, Inc.

Specifications

	TE-EQ2	TE-EV2	TE-EX2
Detector Type	Micro-Bolometer(Uncooled)		
Array format and Pitch	384x288, 12 μ m	640x480, 12 μ m	1024x768 12 μ m
Thermal Sensitivity(NETD)	50mK / F#1.0, Room Temperature		
Spectral Range	8 to 14 μ m		
Power Supply	DC 5V (< 0.46A)	DC 5V (< 0.5A)	DC 5V (< 0.5A)
Power Consumption	< 1.6W@30Hz(Steady State)	< 2.0W@30Hz(Steady State)	< 2.5W@30Hz(Steady State)
Video Output Format	Digital : USB, CameraLink, LVCMOS 3.3V, BT656 Analog : NTSC, PAL		
Frame Rate	30Hz		
Time to First Image	< 7 Sec Max.(Typ. < 6 sec)		
Control Command Protocols	RS-232(Option RS-485)		
Dimensions(WxHxD)	30x30x27 mm	30x36x27 mm	30x36x27 mm
Weight	< 50g(Without Lens)		
Operating Temperature	-10 $^{\circ}$ C ~ 65 $^{\circ}$ C(Optional -40 $^{\circ}$ C ~ 65 $^{\circ}$ C)		
Storage Temperature	-40 $^{\circ}$ C ~ 85 $^{\circ}$ C		
Scene Range Temperature	-10 $^{\circ}$ C ~ 150 $^{\circ}$ C(Optional 0 $^{\circ}$ C ~ 500 $^{\circ}$ C)		

Lens Information

	F/L	FOV(H x V)	Mount
TE-EX2 1024x768 12 μ m	13mm@f/1.0	54 x 40.6	M34 x 0.75
	19mm@f/1.0	38.4 x 28.4	M34 x 0.75
	25mm@f/1.0	27.7 x 20.9	M34 x 0.75
	35mm@f/1.0	20 x 15.1	M45 x 1
	50mm@f/1.2	13.9 x 10.5	M45 x 1

	F/L	FOV(H x V)	Mount
TE-EV2 640x480 12 μ m	4.9mm@f/1.0	95 x 69.6	M24 x 0.5
	8.7mm@f/1.0	50.8 x 38	M24 x 0.5
	13.5mm@f/1.0	32 x 24	M24 x 0.5
	18mm@f/1.0	24 x 18.1	M24 x 0.5
	24mm@f/1.0	18 x 13.6	M24 x 0.5

	F/L	FOV(H x V)	Mount
TE-EQ2 384x288 12 μ m	2.5mm@f/1.0	110.4 x 81.2	M18 x 0.5
	4.4mm@f/1.0	60.4 x 44.9	M18 x 0.5
	6.3mm@f/1.0	42.2 x 31.6	M18 x 0.5
	9.1mm@f/1.0	28.4 x 19.3	M18 x 0.5
	13.5mm@f/1.0	19.3 x 14.5	M24 x 0.5
	18mm@f/1.0	14.5 x 10.9	M24 x 0.5