

Affordable Thermal IP Camera

emTake will release entry-level price of micro-bolometer thermography IP Camera (EM31) in March/2018

● Camera Concept

- 1) Supporting both surveillance and thermography function
- 2) Real time monitoring from anywhere/ anytime with smartphones and a PCs
- 3) Alarm for motion / temperature change
- 4) Compatible with pre-installed security system (ONVIF)



● System Configuration

Camera



- Compose : Camera Head, stand, power adapter
- . Ethernet/WiFi/Bluetooth inside
- . 80 x 60 micro-bolometer thermal sensor inside
- Accessory(Optional) : wall mounted bracket

viewer S/W

- Android / IOS viewer App. ,
- Windows security viewer S/W

Server

- Relay server



● Spec. (more info : www.emtake.com)

Resolution	80 x 60, Micro Bolomerer Array
Shutterless	Shutterless Config
Viewing of angle	30° lens / 90° lens
Measuring range	-20°C~100°C (Extensible to 200°C)
Relative temperature sensing power	0.1°C @ 30°C
Frame rate	10 ~ 30 Frame/sec
Network	Ethernet, Bluetooth 4.0, WIFI (Embedded)
Viewer App., S/W	Smartphone(Android, IOS), Windows PC
Design	Black / White , Intenna

● Application

security



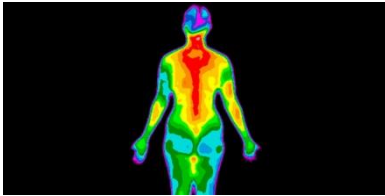
early preventing a fire



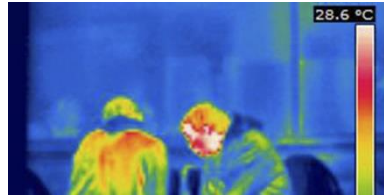
diagnosis building



detecting a patient



health care for elderly



at a large public place



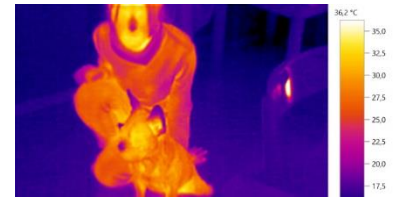
detecting an animal's temp.



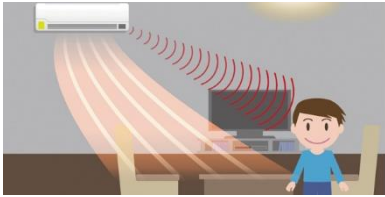
protecting a livestock/poultry



care for companion animal



smart air conditioner, boiler



automobile



thermal sensing robot, drone



Thermal Sensor Module

TW35 is affordable uncooled LWIR microbolometer thermography sensor module

● Spec. (more info : www.emtake.com)

- Long wave infrared spectral range from 8 μ m to 14 μ m
- Pixel pitch : 35 μ m, 80 x 60 focal plane array
- NETD (Thermal sensitivity) < 100 mK (0.10 $^{\circ}$ C)
- Shutter-less operation & Wide Dynamic Range
- Lens : 30 $^{\circ}$ / 90 $^{\circ}$
- I/O : USB / SPI / I2C / Alarm / Reset / GPIO
- Size : 40mm x 40mm



[Sample is available]

● Technology

- uncooled a-Si micro-bolometer based on ASL/ACLTM technology fabricated at commercial CMOS foundry

emTake is a distributor of sensor module by contract