# FIXED MODUM





The Fixed Modum is a highly accurate temperature detection and profiling system. When deployed with the supplied Blackbody the Fixed Modum is accurate to within 0.3 degrees making it perfect for standoff elevated body temperature detection requirements.

The Fixed Modum can be deployed as a standalone system or as part of a larger network deployed system feeding back to a centralised command and control location.

The Fixed Modum twins a highly accurate thermal camera with a HD daylight camera allowing for the quick identification and recording of the source of the trigger. This makes it perfect to integrate alongside a facial recognition capability.

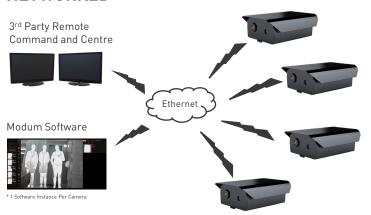
#### **KEY FEATURES**

- High accuracy (0.3 Degrees)
- High 640x512 and low 384x288 resolution options
- Heat measurement up to 5m away
- Secondary HD visible camera
- Paired blackbody for temperature reference
- SDK support

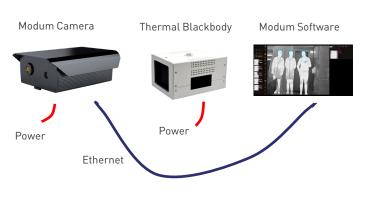




## **NETWORKED**



# TYPICAL DEPLOYMENT



Specifications may be subject to change without notice. 11/06/20 V4.13





# FIXED MODUM

HIGH ACCURACY STANDOFF BODY TEMPERATURE DETECTION



GENERAL		
Part	FD384H	FD640H
Lens	7.8mm	15mm
Field of View	47.0°(H) x 35.6°(V)	33.3° (H) x 27.0° (V)
Detector	V0x uncoo	led thermal FPA
Resolution	384x288	640x512
Pixel Size	17µm	14µm
Spectral Band	8 to 14	μm (LWIR)
Sensitivity	<40mK	@ 25°C, F1.0
Frequency		50Hz
Measurement Range		1-5m

THERMAL IMAGE	
Image Adjustments	Brightness, Contrast. Manual/Auto
Polarity	Hot / Cold (colour related to the chosen palette)
Palette	16 Colour Palettes
Focus	Electronic Autofocus, Manual Focus
Image Process	NUC / DDE / Digital Filtering Noise Reduction
ROI	Yes

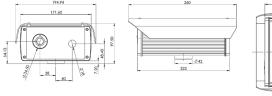
TEMPERATURE MEASUREMENT	
Measurement Range	0°C to 60°C
Measurement Accuracy	$\pm 0.5^{\circ}\text{C}$ at 33°C to 42°C of target temperature ( $\pm 0.3^{\circ}\text{C}$ with blackbody)
Working Temperature	16 to 32°C (with 0.3°C accuracy with blackbody)
Measurement Tools	Heat Measurement Box (drawn on screen)
Time to Stabilise	< 10 Minutes (from power up)
Measurement Stable Time	≼10s (fastest)

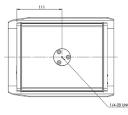
VISIBLE CAMERA	
Focal Length	8mm Fixed lens
Image Sensor	1/2.8" CMOS (2.13MP)
Resolution	1920 x 1080 (Full HD)
Horizontal FOV	39°
Focus	Fixed
Minimum Sensitivity	0.1 lux

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Minimum Sensitivity	0.1 lux
IMAGE PRESENTATION	
Video Output	IP RTSP / SDK Integration
Video over IP	ONVIF streams ~ Thermal only, Visible Only, Thermal with Visible Picture in Picture (PiP)

	video over iP	ONVIP streams ~ Thermat only, Visible Only, Thermat with Visible Picture in Picture (PIP)
	TELEMETRY	
	Protocols	SDK/Custom IP Alerts* and ONVIF Motion Start Alert for Temperature Alarm**
*To allow integrated custom IP		stom IP protocols **Delivery by SSL ONVIF bridge software

## **MECHANICAL DRAWINGS**





PHYSICAL CHARACTERISTICS	
Part Number	RCF
Input Voltage	Nominal 24VDC
Power Consumption	Typical: 53W, Peak:100W
Housing Material	Iridited aluminium, powder marine grade paint finish
Camera Weight	5kg / 12.2lb
Camera Size (mm)	H98 x W195 x D260
Colour	Black

INTERFACES	
Ethernet	Command and control of all functions including streaming of H.264 Video
Connectors	Stand Unit (1x RJ45, 1x 2.5mm DC Jack)

ENVIRONMENTAL		TAL .
	IP Rating	IP55
	Temperature Range	-30°C (-22°F) up to 65°C (149°F) (-40°C with optional heater)

BLACKBODY	
Voltage Input	110-240VAC
Power	260W Peak
Working Temperature	5-100°C
Time to Stabilise	<5 Minutes
Blackbody Weight	1.5kg / 3.3lb
Black Body Size (mm)	H110 x W150 x D195
IP Rating	IP42
Colour	White

MINIMUM PC/LAPTUP HARDWARE SPECIFICATION	
CPU	I5 (or equivalent)*
RAM	8GB
Operating System	Windows 10
Monitor Resolution	HD
Hard Drive	Minimum 256GB
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MODUM PART NUMBERS	
RCF-FD384H	Modum elevated body temperature detection camera [384x288, 7.8mm lens], blackbody, including 5m cable assembly, PSU, camera wall mount and software on a USB flash drive
RCF-FD640H	Modum elevated body temperature detection camera (640x512, 15mm lens), blackbody, including 5m cable assembly. PSU, camera wall mount and software on a USB flash drive

OF HONAL ACCESSORIES	
RCF-LAPTOP	Modum laptop (pre-configured)
RCF-TRIPODM	Modum camera tripod
RCF-TRIPODB	Blackbody tripod
RCF-WMB	Blackbody wall mount
RCF-CC	Modum carry case
RCF-TROLLEY	Modum system trolley

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