

# COOLED THERMAL CAMERAS

## SD COOLED MWIR THERMAL ZOOM LENS CAMERAS



\* Illustration indicative & subject model

### THERMAL SENSOR

Part Number	RHT07IGB16Z300FW	RHT07IGB30Z550FW	RHT07IGB43Z785FW
Focal Length	16.6mm to 300mm	30.5mm to 550mm	43.6mm to 785mm
Horizontal Field of View	32.0° (W) to 1.8° (T)	18.0° (W) to 1.0° (T)	12.6° (W) to 0.7° (T)
F Number	F4.0		
Optical Zoom (Continuous)	18x, Motorised	18x, Motorised	18x, Motorised
Digital Zoom	8x		
Focus	Push autofocus, manual		
Detector Type	XBn, 20mK (NETd) @ room temperature, <30mK (Temporal NETd) @ room temperature, 30Hz, 15µm, 640 x 512 {extended 50,000 hour (MTBF) cooler is a cost option}		
Spectral Band	3 to 5µm (MWIR)		
Image Stabilization	Yes, electronic image stabilisation (cost option)		
Image Processing	Adaptive histogram equalization, linear AGC, manual gain and offset, sharpness control, edge enhancement, 7x colour palette options including monochrome		
Compatible PTU's	Osiris PTU and Jaegar PTU		Jaegar PTU Only

### ELECTRICAL AND MECHANICAL

Boresight Mechanism	Aluminium, quick release L bracket with micro adjustment boresight mechanism		
Video Output	IP, ONVIF, RTSP {Composite (PAL/NTSC) Optional}		
IP Rating	IP67		
Temperature Range	-32°C (-25°F) Up to 65°C (149°F) (-40°C with optional heater)		
Housing Material and Finish	Chromate conversion coated aluminium, (dry nitrogen backfilled, white powder marine grade paint finish)		
Weight (Typical)	Typically 6.5kg / 14lb	Typically 7kg / 15.5lb	Typically 14kg / 31.5lb
Dimensions (Typical)	L391mm (excluding bracket)	L479mm (excluding bracket)	L645mm (excluding bracket)

### PART CODES

RHT07IGB16Z300FW	Cooled thermal IP camera, with a 16.6-300mm, F4.0 thermal zoom lens and array format of 640x512, 15µm, 30Hz, including auto focus, white colour
RHT07IGB30Z550FW	Cooled thermal IP camera, with a 30.5-550mm, F4.0 thermal zoom lens and array format of 640x512, 15µm, 30Hz, including auto focus, white colour
RHT07IGB43Z785FW	Cooled thermal IP camera, with a 43.6-785mm, F4.0 thermal zoom lens and array format of 640x512, 15µm, 30Hz, including auto focus, white colour
Options	All optional features, modules, cable and ancillary part numbers are available upon request

Specifications may be subject to change without notice.  
E&EO 24/10/23 V4.8

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## HD COOLED MWIR THERMAL ZOOM LENS CAMERAS



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THERMAL SENSOR						
Part Number	RHT07IGD55Z550FW	RHT07IGD43Z785FW	RHT07IGD75Z900FW	RHT07IGD55Z1000FW	RHT07IGD100Z1200FW	RHT07HB80Z960FW
Focal Length	55mm to 550mm	43.6mm to 785mm	75mm to 900mm	55.5mm to 1000mm	100mm to 1200mm	80mm to 960mm
Horizontal Field of View	13.3° (W) to 1.3° (T)	16.6° (W) to 0.9° (T)	9.8° (W) to 0.82° (T)	13.3° (W) to 0.7° (T)	7.3° (W) to 0.6° (T)	11.0° (W) to 0.9° (T)
F Number	F4.0					
Optical Zoom (Continuous)	10x, Motorised	18x, Motorised	12x, Motorised	18x, Motorised	12x, Motorised	12x, Motorised
Digital Zoom	8x					
Focus	Push autofocus, manual					Continuous autofocus, manual
Detector Type	XBn, 20mK (NETd) @ room temperature, <30mK (Temporal NETd) @ room temperature, 30Hz, 10µm, HD (1280 x 1024) {extended 50,000 hour (MTBF) cooler is a cost option}					CMT; Long life linear (50,000hrs), 27.5 mK (NETd) typical, 60Hz, 12µm, HD (1280 x 720)
Spectral Band	3 to 5µm (MWIR)					3.7 to 4.95 µm (MWIR)
Image Processing	Adaptive histogram equalization, linear AGC, manual gain and offset, sharpness control, edge enhancement, 7x colour palette options including monochrome					Turbulence mitigation, dynamic range enhancement (LACE, Linear, Edge enhancement), 2x colour palettes (black-hot, white-hot)
Image Stabilization	Yes, electronic image stabilisation (cost option)					Yes, electronic image stabilisation
ATCOM	-	ATCOM (cost option) Includes turbulence mitigation, electronic image stabilisation, LACE and super resolution				-
Compatible PTU's	Osiris PTU and Jaegar PTU		Jaegar PTU Only			

ELECTRICAL AND MECHANICAL						
Boresight Mechanism	Aluminium, quick release L bracket with micro adjustment boresight mechanism					
Video Output	IP, ONVIF, RTSP					
IP Rating	IP67					
Temperature Range	-32°C (-25°F) Up to 65°C (149°F) (-40°C with optional heater)					-32°C (-25°F) Up to 55°C (131°F)
Housing Material and Finish	Chromate conversion coated aluminum, (dry nitrogen backfilled, white powder marine grade paint finish)					Glass fibre polyester resin & gelcoat and gloss white polyurethane finish
Weight (Typical)	Typically 7kg / 15.5lb	Typically 14kg / 31.5lb	Typically 14.5kg / 32lb	Typically 22.7kg / 50lb	Typically 29kg / 64lb	Typically 23Kg / 50.7lb
Dimensions (Typical)	L479mm (excluding bracket)	L645mm (excluding bracket)	L622mm (excluding bracket)	L750mm (excluding bracket)	L940mm (excluding bracket)	L597 x W299 x H299mm (excluding bracket)

PART CODES	
RHT07IGD55Z550FW	HD Cooled thermal IP camera, with a 55-550mm, F4.0 thermal zoom lens and array format of 1028x1024, 10µm, 30Hz, including auto focus, white colour
RHT07IGD43Z785FW	HD Cooled thermal IP camera, with a 43.6-785mm, F4.0 thermal zoom lens and array format of 1280x1024, 10µm, 30Hz, including auto focus, white colour
RHT07IGD75Z900FW	HD Cooled thermal IP camera, with a 75-900mm, F4.0 thermal zoom lens and array format of 1280x1024, 10µm, 30Hz, including auto focus, white colour
RHT07IGD55Z1000FW	HD Cooled thermal IP camera, with a 55.5-1000mm, F4.0 thermal zoom lens and array format of 1280x1024, 10µm, 30Hz, including auto focus, white colour
RHT07IGD100Z1200FW	HD Cooled thermal IP camera, with a 100-1200mm, F4.0 thermal zoom lens and array format of 1280x1024, 10µm, 30Hz, including auto focus, white colour
RHT07HB80Z960FW	HD Cooled thermal IP camera, with a 80-960mm, F4.0 thermal zoom lens and array format of 1280x720, 12µm, 60Hz, including image stabilisation, turbulence mitigation and auto focus, white colour
Options	All optional features, modules, cable and ancillary part numbers are available upon request

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## TELEMETRY

Presets	127x Preset positions
Protocols	Pelco D, Pelco D Extended, ONVIF Profile S
Parameter Programming	RS485
Positioning	Absolute positioning feedback
Additional features	Programmable text within picture (camera ID), parameter control (RS485) TCP/IP prepared

## NETWORK

Ethernet	10/100 Base-T
Connectivity	Cat5e via multicore cable tail/PSU
Configuration	Via web browser
Network Protocols	Networking: IPv4/v6, UDP, TCP, IGMP, ARP, DHCP, DNS, NT, Streaming: RTSP, RTP, HTTP, Web Sockets Management: HTTP, HTTPS, Bonjour, ONVIF, PSIA, ION API, SNMP, SMTP Security: Basic / Digest Authentication, SSL
Latency	Can reach less than 100ms latency

## IMAGE PROCESSING

Video Compression	H.264/MPEG4 Part 2, M-JPEG (H.265 option available upon request)
H.264 Performance (Standard)	Total D1 at 390 fps or Full HD 1080p at 65 fps Examples: 2x 1080p at 30 fps (HD video/thermal) or 2x D1 at 30 fps (thermal / SD)
Image Processing	Image resizing and scaling ratio, noise reduction, edge enhancement (sharpness), ROI based video compression
Software Update	Remote / IP accessible
Other Features	Email notifications, text overlay

## OPTIONS

Brackets	4" PCD Adjustable mount bracket
Storage	Up to 64GB in total via SD/MMC (32GB available per channel if using thermal and video / 2x cameras)
Miscellaneous	Automatic tracking*, image stabilisation, laser range finder*, laser illuminator*, white light illuminator*, IR illuminator*, signal light gun*, UAV effector*, acoustic hailer* window flap/cover, heater.  * (When part of a PTU system)  Please contact us if you have a specific requirement that is not mentioned in this document.

PLEASE CONTACT US FOR A SPECIFIC CONFIGURATION

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