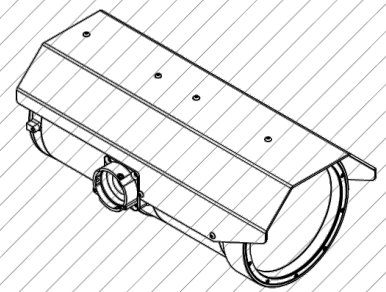


RHT THERMAL CAMERAS

UNCOOLED THERMAL FIXED LENS SENSORS



* Illustration indicative & subject model

THERMAL IMAGER

Part Number	RHT06IDB44FW	RHT06IDB25FW	RHT06IDB18FW	RHT06IDB12FW	RHT06IDB09FW	RHT06IDB06FW
Focal Length	14mm	25mm	35mm	50mm	65mm	100mm
Horizontal Field of View	44°	24.8°	17.6°	12.4°	9.6°	6.2°
F Number	F1.4	F1.2	F1.2	F1.2	F1.2	F1.6
Optical Zoom (Continuous)	-	-	-	-	-	-
Sensitivity	<50 mK (NETd) at room temperature					
Detector Type	Uncooled VOx Microbolometer					
Resolution	17µm, 640 x 480 (Lower resolution 320 x 240 sensors are available upon request)					
Spectral Band	8 to 14µm (LWIR)					
Frequency	25Hz (9Hz, 30Hz options)					
Focus	Fixed					
Digital Zoom	4x Digital zoom (8x optional)					
Image Stabilisation	Yes, electronic (cost option)					
Image Processing	Polarity control, tune-able contrast enhancement					
Image Control	Polarity: White hot / black hot. Orientation: Invert / revert					

ELECTRICAL AND MECHANICAL

Rapid Release Mechanism	Yes
Video Output	IP, ONVIF, RTSP and Composite (PAL / NTSC)
IP Rating	IP67
Temperature Range	-30°C [-22°F] Up to 65°C [149°F] (-40°C with optional heater)
Power	28-32VDC, 16W (with heater at +25W)
Fixing Material	Stainless steel with external fall protection
Housing Material and Finish	Iridited aluminium, white powder marine grade paint finish (other colours are available upon request)
Housing Model	HT06
Weight	Typically 4Kg / 8.8lb
Dimensions (mm)	L460 x W184 x H156
Compatible PTU's	Osiris PTU and Jaegar PTU

PART CODES

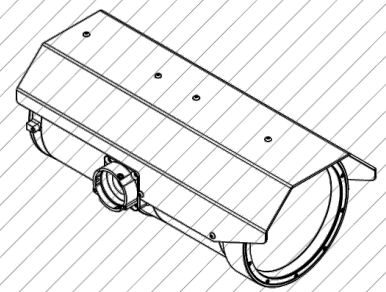
RHT06IDB44FW	Thermal IP camera, with a 14mm, F1.4 thermal lens and array format of 640x480, 17µm, 25Hz, white colour
RHT06IDB25FW	Thermal IP camera, with a 25mm, F1.2 thermal lens and array format of 640x480, 17µm, 25Hz, white colour
RHT06IDB18FW	Thermal IP camera, with a 35mm, F1.2 thermal lens and array format of 640x480, 17µm, 25Hz, white colour
RHT06IDB12FW	Thermal IP camera, with a 50mm, F1.2 thermal lens and array format of 640x480, 17µm, 25Hz, white colour
RHT06IDB09FW	Thermal IP camera, with a 65mm, F1.2 thermal lens and array format of 640x480, 17µm, 25Hz, white colour
RHT06IDB06FW	Thermal IP camera, with a 100mm, F1.6 thermal lens and array format of 640x480, 17µm, 25Hz, white colour
Options	All optional features, modules, cable and ancillary part numbers are available upon request

Specifications may be subject to change without notice.
22/07/21 V4.5



RHT THERMAL CAMERAS

UNCOOLED THERMAL ZOOM LENS SENSORS



* Illustration indicative & subject model

THERMAL IMAGER

Part Number	RHT07IDB15Z100FW	RHT06IDB26Z105FW	RHT07IDB25Z150FW	RHT07IDB25Z225FW
Focal Length	15mm to 100mm	26 mm to 105mm	25mm to 150mm	25mm to 225mm
Horizontal Field of View	42.2° (W) to 6.2° (T)	25.3° (W) to 5.9° (T)	25.3° (W) to 4.1° (T)	22.3° (W) to 2.8° (T)
F Number	F1.4	F1.6	F1.4	F1.5
Optical Zoom (Continuous)	6.6x, Motorised	4x, Motorised	6x, Motorised	9x, Motorised
Sensitivity	<50 mK (NETd) at room temperature			
Detector Type	Uncooled VOx Microbolometer			
Resolution	17µm, 640 x 480 (Lower resolution 320 x 240 sensors are available upon request)			
Spectral Band	8 to 14µm (LWIR)			
Frequency	25Hz (9Hz, 30Hz options)			
Focus	Manual (push autofocus cost option)			
Digital Zoom	4x Digital zoom (8x optional)			
Image Stabilisation	Yes, electronic (cost option)			
Image Processing	Polarity control, tune-able contrast enhancement			
Image Control	Polarity: White hot / black hot. Orientation: Invert / revert			

ELECTRICAL AND MECHANICAL

Rapid Release Mechanism	Yes			
Video Output	IP, ONVIF, RTSP and Composite (PAL / NTSC)			
IP Rating	IP67			
Temperature Range	-30°C (-22°F) Up to 65°C (149°F) [-40°C with optional heater]			
Power	28-32vDC, 20W, 33W Peak (with heater at +25W)			
Fixing Material	Stainless steel with external fall protection			
Housing Material and Finish	Iridited aluminium, white powder marine grade paint finish (other colours are available upon request)			
Housing Model	HT07	HT06	HT07	
Weight	Typically 12Kg / 26.4lb	Typically 4Kg / 8.8lb	Typically 12Kg / 26.4lb	
Dimensions (mm)	L572 x W258 x H226	L460 x W184 x H156	L572 x W258 x H226	
Compatible PTU's	Osiris PTU and Jaegar PTU			

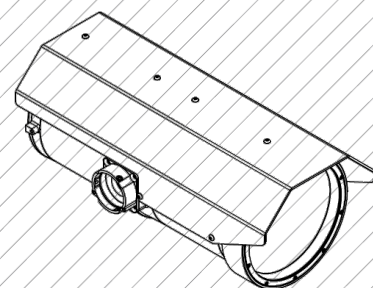
PART CODES

RHT07IDB15Z100FW	Thermal IP camera, with a 15-100mm, F1.4 thermal zoom lens and array format of 640x480, 17µm, 25Hz, white colour
RHT06IDB26Z105FW	Thermal IP camera, with a 26-105mm, F1.6 thermal zoom lens and array format of 640x480, 17µm, 25Hz, white colour
RHT07IDB25Z150FW	Thermal IP camera, with a 25-150mm, F1.4 thermal zoom lens and array format of 640x480, 17µm, 25Hz, white colour
RHT07IDB25Z225FW	Thermal IP camera, with a 25-225mm, F1.5 thermal zoom lens and array format of 640x480, 17µm, 25Hz, white colour
Options	All optional features, modules, cable and ancillary part numbers are available upon request

Specifications may be subject to change without notice.
22/07/21 V4.5

RHT THERMAL CAMERAS

LR UNCOOLED THERMAL ZOOM LENS SENSORS



* Illustration indicative & subject model

THERMAL IMAGER

Part Number	RHT07ILB15Z75FW	RHT07ILB25Z150FW	RHT07ILB25Z225FW	RHT07ILB40Z300FW
Focal Length	15mm to 75mm	25mm to 150mm	25mm to 225mm	40mm to 300mm
Horizontal Field of View	28.7° (W) to 5.9° (T)	17.5° (W) to 3.0° (T)	17.5°(W) to 2.0° (T)	11.0° (W) to 1.5° (T)
F Number	F1.2	F1.4	F1.5	F1.5
Optical Zoom (Continuous)	5x, Motorised	6x, Motorised	9x, Motorised	7.5x, Motorised
Sensitivity	<30 mK (NETd) f/1.0 at room temperature*			
Detector Type	Uncooled VOx Microbolometer			
Resolution	12µm, 640 x 480			
Spectral Band	7.5 to 13µm (LWIR)			
Frequency	25Hz (9Hz option)			
Focus	Push autofocus, manual			
Digital Zoom	4x Digital zoom			
Image Stabilisation	Yes, electronic			
Image Processing	CLAHE / LAP Alpha blending			
Image Control	Polarity: White hot / black hot, various user palettes. Orientation: Invert / revert. Shutter and scene based NUC. Spatial / temporal de-noise. Automatic gain control.			

ELECTRICAL AND MECHANICAL

Rapid Release Mechanism	Yes		
Video Output	IP, ONVIF, RTSP, Composite (PAL / NTSC)		
IP Rating	IP67		
Temperature Range	-30°C (-22°F) Up to 65°C (149°F) [-40°C with optional heater]		
Power	28-32vDC, 20W, 33W Peak (with heater at +25W)		
Fixing Material	Stainless steel with external fall protection		
Housing Material and Finish	Iridited aluminium, white powder marine grade paint finish (other colours are available upon request)		
Housing Model	HT07		HT07-300LR
Weight	Typically 12Kg / 26.4lb		Typically 18.3Kg / 40.4lb
Dimensions (mm)	L572 x W258 x H226		L580 x W282 x H257
Compatible PTU's	Osiris PTU and Jaegar PTU		Jaegar PTU (only)

PART CODES

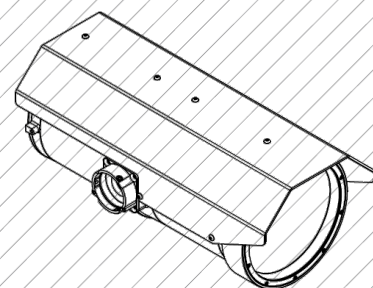
RHT07ILB15Z75FW	LR Advanced Uncooled Thermal IP camera, with a 15-75mm, F1.2 thermal zoom lens and array format of 640x480, 12µm, 25Hz, including image stabilisation and auto focus, white colour
RHT07ILB25Z150FW	LR Advanced Uncooled Thermal IP camera, with a 25-150mm, F1.4 thermal zoom lens and array format of 640x480, 12µm, 25Hz, including image stabilisation and auto focus, white colour
RHT07ILB25Z225FW	LR Advanced Uncooled Thermal IP camera, with a 25-225mm, F1.5 thermal zoom lens and array format of 640x480, 12µm, 25Hz, including image stabilisation and auto focus, white colour
RHT07ILB40Z300FW	LR Advanced Uncooled Thermal IP camera, with a 40-300mm, F1.5 thermal zoom lens and array format of 640x480, 12µm, 25Hz, including image stabilisation and auto focus, white colour
Options	All optional features, modules, cable and ancillary part numbers are available upon request

*As measured after image post-process techniques were applied

Specifications may be subject to change without notice.
22/07/21 V4.5

RHT THERMAL CAMERAS

COOLED THERMAL ZOOM LENS SENSORS



* Illustration indicative & subject model

THERMAL IMAGER

Part Code	RHT07IGB19Z275FW	RHT07IGHB15Z300FW	RHT07IGHB35Z690FW	RHT07IGHB45Z900FW	RHT07HB80Z960FW
Focal Length	19mm to 275mm	15mm to 300mm	35mm to 690mm	45mm to 900mm	80mm to 960mm
Horizontal Field of View	28.3° (W) to 2.0° (T)	35.5° (W) to 1.83° (T)	15.6° (W) to 0.8° (T)	12.2° (W) to 0.61° (T)	11.0° (W) to 0.9° (T)
F Number	F5.5	F4.0	F4.0	F4.0	F4.0
Optical Zoom (Continuous)	14.5x, Motorised	20x, Motorised	19.7x, Motorised	20x, Motorised	12x, Motorised
Sensitivity	<25 mK [NETd] @ room temperature				27.5 mK [NETd] Typical
Detector Type	Cooled InSb FPA; Stirling cycle, integrated (10,000hrs); Cool down time <10 Minutes, 6 minutes typical	T2SL HOT; Stirling cycle, integrated (20,000hrs); Cool down time <10 Minutes, 6 minutes typical			CMT; Long life linear (50,000hrs); Cool down time 3 to 4 Minutes typical
Resolution	15µm, 640 x 512				12µm, 1280 x 720
Spectral Band	3.4 to 5.1µm (MWIR)	3.6 to 4.5µm (MWIR)			3.7 to 4.95 µm (MWIR)
Frequency	30Hz	60Hz			
Focus	Push autofocus, manual				
Digital Zoom	4x Digital zoom				8x Digital zoom
Image Stabilisation	Yes, electronic				
Image Processing	AGC, CLAHE, LAP				Linear, lace, edge enhancement
Image Control	Noise reduction, sharpen, alpha-blend. Palettes: Black-hot, white-hot, user colour palettes				Palettes: Black-hot white-hot
Turbulence Mitigation	No				Yes

ELECTRICAL AND MECHANICAL

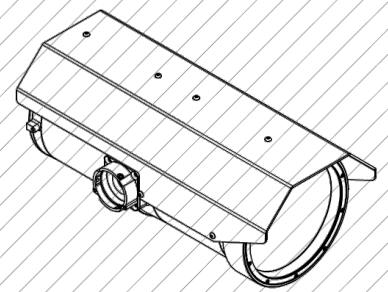
Rapid Release Mechanism	Yes			No	
Video Output	IP, ONVIF, RTSP {Composite (PAL / NTSC) are cost options}			IP, ONVIF, RTSP	
IP Rating	IP67				
Temperature Range	-30°C [-22°F] Up to 65°C [149°F] [-40°C with optional heater]			-32°C [-25°F] Up to 55°C [131°F]	
Power	28-32VDC, 20W, 49W Peak (with heater at +25W)			28VDC, 25W Peak	
Fixing Material	Stainless steel with external fall protection			Anodised aluminium alloy	
Housing Material and Finish	Iridited aluminium, white powder marine grade paint finish (other colours are available upon request)			Glass fibre polyester resin & gelcoat and gloss white polyurethane finish	
Housing Model	HT07	HT07-690	HT07-900	HT07-960	
Weight	Typically 12Kg / 26.4lb	Typically 11Kg / 24.2lb	Typically 18.2Kg / 40.1lb	Typically 23Kg / 50.7lb	
Dimensions (mm)	L572 x W258 x H226	L521 x W254x H231	L607 x W320x H328	L597 x W299 x H299	
Compatible PTU's	Osiris PTU and Jaegar PTU			Jaegar PTU (only)	

PART CODES

RHT07IGB19Z275FW	Cooled thermal IP camera, with a 19-275mm, F5.5 thermal zoom lens and array format of 640x512, 15µm, 30Hz, including image stabilisation and auto focus, white colour
RHT07IGHB15Z300FW	Cooled thermal IP camera, with a 15-300mm, F4.0 thermal zoom lens and array format of 640x512, 15µm, 60Hz, including image stabilisation and auto focus, white colour
RHT07IGHB35Z690FW	Cooled thermal IP camera, with a 35-690mm, F4.0 thermal zoom lens and array format of 640x512, 15µm, 60Hz, including image stabilisation and auto focus, white colour
RHT07IGHB45Z900FW	Cooled thermal IP camera, with a 45-900mm, F4.0 thermal zoom lens and array format of 640x512, 15µm, 60Hz, including image stabilisation and auto focus, white colour
RHT07HB80Z960FW	Cooled thermal IP High Definition 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

Specifications may be subject to change without notice.
22/07/21 V4.5

RHT THERMAL CAMERAS



* Illustration indicative & subject model

GENERAL SPECIFICATION

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*, 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.