

# HM-TD2037T-10/X Thermographic Network Box Camera





The Thermographic Network Box Camera with small size, low power consumption and simple integration realizes real-time high-accuracy object temperature measurement.

#### Key Feature

- 384 × 288 resolution, high sensitivity sensor
- Object temperature range: 20 °C to 150 °C (- 4 °F to 302 °F), 0 °C to 550 °C (32 °F to 1022 °F); Max (± 2 °C, ± 2%)
- Temperature measurement at user-defined points, lines, and areas
- A highlighted cross at the max. temperature in the thermal image
- Thermal image frame rate: 50 fps
- Color alarm (isotherm) available for Above, Between, and Below object temperatures



## Specification

Image Sensor         Vanadium Oxide Uncooled Focal Plane Arrays           Resolution         384 × 288           Pixel Pitch         17 μm           Spectral Range         8 μm to 14 μm           NETD         < 35 mK (25 °C, F# = 1.0)           Focal Length         9.7 mm           IFOV         1.75 mrad           Field of View         37.5° × 28.5° (H x V)           Min. Focusing Distance         1.5 m           Aperture         F 1.0           Measurement and Analysis           Object Temperature Range         - 20°C to 150°C (-4° F to 302°F), 0°C to 550°C (32° F to 1022°F)           Temperature Accuracy         Max (± 2°C, ± 2%)           Measurement Presets         Hot spot, cold spot in real time           Point         10 User Presets           Area         7 User Presets           Color Alarm (Isotherm)         Above/Between/Below           Thermographic Integration         Thermographic Integration           Thermographic Data Upload         A fiss, 32-bit 384 × 288 per frame           Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, 15API, and SDK           Raw bata Upload         Real-time full-screen YUV data via RTSP and SDK           Video and Image         15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbo	The served Mandala	
Resolution         384 × 288           Pixel Pitch         17 μm           Spectral Range         8 μm to 14 μm           NETD         < 35 mK (25 °C, F# = 1.0)           Focal Length         9.7 mm           IFOV         1.75 mrad           Field of View         37.5° × 28.5° (H x V)           Min. Focusing Distance         1.5 m           Aperture         F 1.0           Measurement and Analysis         Object Temperature Range           Object Temperature Range         - 20 °C to 150 °C (-4 °F to 302 °F), 0 °C to 550 °C (32 °F to 1022 °F)           Measurement Presets         Hot spot, cold spot in real time           Point         10 User Presets           Area         7 User Presets           Area         7 User Presets           Color Alarm (Isotherm)         Above/Between/Below           Thermographic Integration         Temperature Metadata           Temperature Metadata         Continuous output data of preset thermographic rules and measured temperature           Thermographic Data Encoding         4 fps, 32-bit 384 × 288 per frame           Real-time full-screen Hermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, 15AP, and 5DK           Wideo and Image         Wairine full-screen YUV data via RTSP and SDK           Video Compression         H.	Thermal Module	
Pixel Pitch 17 μm  Spectral Range 8 μm to 14 μm  NETD < 35 mK (25 °C, F# = 1.0)  Focal Length 9.7 mm  IFOV 1.75 mrad  Field of View 37.5° × 28.5° (H x V)  Min. Focusing Distance 1.5 m Aperture F 1.0  Measurement and Analysis  Object Temperature Range - 20 °C to 150 °C (-4 °F to 302 °F), 0 °C to 550 °C (32 °F to 1022 °F)  Temperature Accuracy Max (± 2 °C, ± 2 %)  Measurement Presets Hot spot, cold spot in real time  Point 10 user Presets  Line 1 user Presets  Cloir Alarm (Isotherm) Above/Between/Below  Thermographic Integration  Temperature Metadata Continuous output data of preset thermographic rules and measured temperature Thermographic Data Encoding 4 fps, 32-bit 384 × 288 per frame  Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK  Raw Data Upload Real-time full-screen YUV data via RTSP and SDK  Video and Image  Main Stream 50 fps (384 × 288)  Video Compression H. 264/MIPEG 15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Spela, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue  Digital Zoom 2 x, 4 x  Network  Protocols IPA/IPV6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPNP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, CCP, UDP, IGMP, IcMP, DHCP, PPPoE  Simultaneous Live View Up to 6 channels  User/INSE Level Ups accuracy a levels: Administrator, Operator, User  Becurity User August 1, alarm input (0-3.3 VDC)  Alarm Input 1, alarm input (0-3.3 VDC)		
Spectral Range 8 µm to 14 µm  NETD < 35 mK (25 °C, FH = 1.0) Focal Length 9.7 mm  IFOV 1.75 mrad  Field of View 37.5° × 28.5° (H x V)  Min. Focusing Distance 1.5 m Aperture F 1.0  Measurement and Analysis  Object Temperature Range - 20 °C to 150 °C (-4 °F to 302 °F), 0 °C to 550 °C (32 °F to 1022 °F)  Temperature Accuracy Max (± 2 °C, ± 2%)  Measurement Presets Hot spot, cold spot in real time  Point 10 User Presets  Area 7 User Presets  Area 7 User Presets  Area 7 User Presets  Area Color Alarm (Isotherm) Above/Between/Below  Thermographic Integration  Temperature Metadata Continuous output data of preset thermographic rules and measured temperature  Thermographic Data Encoding 4 fps, 32-bit 384 × 288 per frame  Rael-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAP), and SDK  Raw Data Upload Real-time full-screen YUV data via RTSP and SDK  Video and Image  Wideo and Image  Wideo Compression H.264/MJPEG  Color Palettes 15 of ps (384 × 288)  Video Compression 2 x 4 × Network  Protocols 16 Preset Nithe Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue  Digital Zoom 2 x 4 × Network  Protocols 16 Preset Nither, PhTTPS, 802.1x, QoS, FTP, SMTP, UPNP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPOE  Simultaneous Live View Up to 6 channels  User/Host level Up to 32 users, 3 levels: Administrator, Operator, User  Security User authentication (10 and PW), MAC address filtering  Client IVMS-4800  Alarm Input (0-3.3 VDC)  Alarm Input (1, alarm input) (0-3.3 VDC)  Alarm Input (1, alarm input), NC, level quantity	Resolution	384 × 288
NETD < 35 mK (25 °C, F# = 1.0) Focal Length 9,7 mm IFOV 1.75 mrad Field of View 37.5° × 28.5° (H x V) Min. Focusing Distance 1.5 m Aperture F 1.0  Measurement and Analysis Object Temperature Range -20 °C to 150 °C (-4 °F to 302 °F), 0 °C to 550 °C (32 °F to 1022 °F) Temperature Accuracy Max (± 2 °C, ± 2%) Measurement Presets Hot spot, cold spot in real time Point 10 User Presets Line 1 User Presets Line 1 User Presets Cotor Alarm (Isotherm) Above/Between/Below Thermographic Integration Temperature Metadata Continuous output data of preset thermographic rules and measured temperature Atlanta Encoding 4 fps, 32-bit 384 × 288 per frame Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK Raw Data Upload Real-time full-screen YUV data via RTSP and SDK Video and Image Video Compression H.264/MIPEG Color Palettes 5 of ps (384 × 288) Video Compression H.264/MIPEG Color Palettes 15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Spela, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue Digital Zoom 2 × 4 × Network Protocols IPV4/IPV6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPNP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE Simultaneous Live View Up to 6 channels User Austhentication (ID and PW), MAC address filtering Client INMS-4800 Interface Alarm Input 1, alarm input (0-3.3 VDC) Alarm Output; NC, level quantity	Pixel Pitch	17 μm
Focal Length  IFOV  1.75 mrad  Field of View  3.7.5" x 28.5" (H x V)  Min. Focusing Distance  1.5 m Aperture  F 1.0  Measurement and Analysis  Object Temperature Range  -20 °C to 150 °C (-4 °F to 302 °F), 0 °C to 550 °C (32 °F to 1022 °F)  Temperature Accuracy  Max (± 2 °C, ± 2%)  Measurement Presets  Hot spot, cold spot in real time  Point  10 User Presets  Line  1 User Presets  Line  1 User Presets  Line  1 User Presets  Color Alarm (Isotherm)  Above/Between/Below  Thermographic Integration  Temperature Metadata  Continuous output data of preset thermographic rules and measured temperature Presets  Hot spot, cold spot in real time  Point  1 User Presets  Color Alarm (Isotherm)  Above/Between/Below  Thermographic Integration  Thermographic Integration  Thermographic Data Encoding  4 fps, 32-bit 384 × 288 per frame  Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK  Raw Data Upload  Real-time full-screen YUV data via RTSP and SDK  Video and Image  Main Stream  So fps (384 × 288)  Video Compression  H. 264/MIPEG  Color Palettes  Sopeia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue  Digital Zoom  2 x 4 ×  Network  Protocols  IPV4/IPV6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPNP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE  Simultaneous Live View  Up to 6 channels  User JABPH, TCP, UDP, IGMP, ICMP, DHCP, PPPOE  Simultaneous Live View  Up to 32 users, 3 levels: Administrator, Operator, User  Security  User authentication (ID and PW), MAC address filtering  Client  INMS-4800  Hateral  Alarm Input  1, alarm input (0-3.3 VDC)  Alarm Output; NC, level quantity	Spectral Range	
FIFOV 1.75 mrad  Field of View 37.5" × 28.5" (H x V )  Min. Focusing Distance 1.5 m Aperture F1.0  Measurement and Analysis  Object Temperature Range - 20 "C to 150 "C (-4 "F to 302 "F), 0 "C to 550 "C (32 "F to 1022 "F)  Temperature Accuracy Max (± 2 "C, ± 2%)  Measurement Presets Hot spot, cold spot in real time  Point 10 User Presets  Line 1 User Presets  Line 1 User Presets  Color Alarm (Isotherm) Above/Between/Below  Thermographic Integration  Temperature Metadata Continuous output data of preset thermographic rules and measured temperature  Thermographic Data Encoding 4 fps, 32-bit 384 × 288 per frame  Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, 1SAPI, and SDK  Raw Data Upload Real-time full-screen YUV data via RTSP and SDK  Video and Image  Main Stream 50 fps (384 × 288)  Video Compression H.264/MIPEG  Color Palettes 515 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue  Digital Zoom 2 × 4 ×  Network  Protocols IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE  Simultaneous Live View Up to 6 channels  User Just Alexandric ID and PW), MAC address binding, HTTPS encryption, IEEE  802.1x(EAP-MDS, EAP-TLS), access control, IP address filtering  Liver Interface  Alarm Input 1, alarm input (0-3.3 VDC)  Alarm Output 1, alarm output; NC, level quantity	NETD	< 35 mK (25 °C, F# = 1.0)
Field of View  Aperture  Aperture  Aperture  Aperture  Aperture  Aperture  F 1.0  Measurement and Analysis  Object Temperature Range  - 20 °C to 150 °C (- 4 °F to 302 °F), 0 °C to 550 °C (32 °F to 1022 °F)  Temperature Accuracy  Max (± 2 °C, ± 2%)  Measurement Presets  Hot spot, cold spot in real time  Point  10 User Presets  Line  1 User Presets  Clor Alarm (Isotherm)  Above/Between/Below  Thermographic Integration  Temperature Metadata  Continuous output data of preset thermographic rules and measured temperature  Thermographic Data Encoding  A fps, 32-bit 384 × 288 per frame  Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, 1SAPI, and SDK  Raw Data Upload  Real-time full-screen YUV data via RTSP and SDK  Video and Image  Mini Stream  50 fps (384 × 288)  Video Compression  H.264/MJPEG  Color Palettes  50 fps (384 × 288)  Video Compression  H.264/MJPEG  Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue  Digital Zoom  2 × 4 ×  Network  Protocols  FRCP, RTP, TCP, UDP, IgMP, ICMP, DHCP, PPPOE  Simultaneous Live View  Up to 6 channels  User JUP to 4 channels  User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE  802.1x(EAP-MDS, EAP-TLS), access control, IP address filtering  Client  Interface  Alarm Output  1, alarm input (0-3.3 VDC)  Alarm Output  1, alarm output; NC, level quantity	Focal Length	9.7 mm
Min. Focusing Distance Aperture F 1.0  Measurement and Analysis  Object Temperature Range 7-20 °C to 150 °C (- 4 °F to 302 °F), 0 °C to 550 °C (32 °F to 1022 °F)  Temperature Accuracy Max (± 2 °C, ± 2%) Measurement Presets Hot spot, cold spot in real time Point 10 User Presets Line 1 User Presets Line 1 User Presets Color Alarm (Isotherm) Above/Between/Below  Thermographic Integration  Temperature Metadata Continuous output data of preset thermographic rules and measured temperature Thermographic Data Encoding 4 fps, 32-bit 384 × 288 per frame Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK Raw Data Upload Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK  Video and Image  Main Stream 50 fps (384 × 288) Video Compression H.264/MIPEG Color Palettes 50 fps (384 × 288) Video Compression L.264/MIPEG Color Palettes 15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue Digital Zoom 2 × , 4 ×  Network  Protocols   Piv4/IPV6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPOE Simultaneous Live View Up to 6 channels User/Host level Up to 32 users, 3 levels: Administrator, Operator, User User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering Client IVMS-4800 Interface Alarm Input 1, alarm input (0-3.3 VDC) Alarm Output 1, alarm output; NC, level quantity	IFOV	1.75 mrad
Aperture F 1.0  Measurement and Analysis  Object Temperature Range - 20 °C to 150 °C (- 4 °F to 302 °F), 0 °C to 550 °C (32 °F to 1022 °F)  Temperature Accuracy Max (± 2 °C, ± 2%)  Max (± 2 °C, ± 2	Field of View	37.5° × 28.5° (H x V)
Measurement and Analysis         - 20 °C to 150 °C (- 4 °F to 302 °F), 0 °C to 550 °C (32 °F to 1022 °F)           Temperature Range         - 20 °C to 150 °C (- 4 °F to 302 °F), 0 °C to 550 °C (32 °F to 1022 °F)           Temperature Range         - 20 °C to 150 °C (- 4 °F to 302 °F), 0 °C to 550 °C (32 °F to 1022 °F)           Temperature Range         - 40 ct 50 ct 50 °C (32 °F to 1022 °F)           Measurement Presets         Hot spot, cold spot in real time           Unine         1 User Presets           Area         7 User Presets           Color Alarm (Isotherm)         Above/Between/Below           Thermographic Integration         Continuous output data of preset thermographic rules and measured temperature           Temperature Metadata         Continuous output data of preset thermographic rules and measured temperature           Thermographic Data Encoding         4 fps, 32-bit 384 × 288 per frame           Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK           Raw Data Upload         Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK           Wideo Compression         Real-time full-screen YUV data via RTSP and SDK           Video Compression         H.264/MJPEG           Color Palettes         35 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue	Min. Focusing Distance	1.5 m
Object Temperature Range  - 20 °C to 150 °C (- 4 °F to 302 °F), 0 °C to 550 °C (32 °F to 1022 °F) Temperature Accuracy  Max (± 2 °C, ± 2%)  Measurement Presets  Hot spot, cold spot in real time  Point  10 User Presets  Line  1 User Presets  Line  7 User Presets  Color Alarm (Isotherm)  Above/Between/Below  Thermographic Integration  Temperature Metadata  Continuous output data of preset thermographic rules and measured temperature  Thermographic Data Encoding  4 fps, 32-bit 384 × 288 per frame  Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK  Raw Data Upload  Real-time full-screen YUV data via RTSP and SDK  Video and Image  Main Stream  50 fps (384 × 288)  Video Compression  H.264/MJPEG  Color Palettes  15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue  Digital Zoom  2 × 4 ×  Network  Protocols  IPV4/IPV6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPNP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPDE  Simultaneous Live View  Up to 6 channels  User/Host level  Up to 32 users, 3 levels: Administrator, Operator, User  Security  User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MDS, EAP-TLS), access control, IP address filtering  Client  I/MS-4800  Interface  Alarm Input  1, alarm input (0-3.3 VDC)  Alarm Output  Net Cold Speids (12 °C	Aperture	F 1.0
Temperature Accuracy Max (± 2 °C, ± 2%) Measurement Presets Hot spot, cold spot in real time Point 10 User Presets Line 1 User Presets Clor Alarm (Isotherm) Above/Between/Below Thermographic Integration Temperature Metadata Thermographic Data Encoding Thermographic Data Encoding Thermographic Data Upload Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK Raw Data Upload Real-time full-screen YUV data via RTSP and SDK Video and Image Main Stream 50 fps (384 × 288) Video Compression H.264/MJPEG Clor Palettes Digital Zoom 2 × 4 ×  Network  Protocols Pr	Measurement and Analysis	
Measurement Presets Hot spot, cold spot in real time Point 10 User Presets Line 1 User Presets Area 7 User Presets Area 7 User Presets Area 7 User Presets Color Alarm (Isotherm) Above/Between/Below Thermographic Integration Temperature Metadata Continuous output data of preset thermographic rules and measured temperature Thermographic Data Encoding 4 fps, 32-bit 384 × 288 per frame Thermographic Data Upload Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK Raw Data Upload Real-time full-screen YUV data via RTSP and SDK Video and Image Main Stream 50 fps (384 × 288) Video Compression H.264/MJPEG Color Palettes Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue Digital Zoom 2 ×, 4 × Network  Protocols IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPOE Simultaneous Live View Up to 6 channels User/Host level Up to 32 users, 3 levels: Administrator, Operator, User Security 802.1x(EAP-MDS, EAP-TLS), access control, IP address filtering Client iVMS-4800 Interface  Alarm Input 1, alarm input (0-3.3 VDC) Alarm Output 1, alarm output; NC, level quantity	Object Temperature Range	- 20 °C to 150 °C (- 4 °F to 302 °F), 0 °C to 550 °C (32 °F to 1022 °F)
Point 10 User Presets Line 1 User Presets Area 7 User Presets Area 7 User Presets Area 7 User Presets Above/Between/Below Thermographic Integration Temperature Metadata Continuous output data of preset thermographic rules and measured temperature Thermographic Data Encoding 4 fps, 32-bit 384 × 288 per frame Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK Raw Data Upload Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK  Video and Image  Main Stream 50 fps (384 × 288) Video Compression H.264/MIPEG Color Palettes 5peia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue Digital Zoom 2 × x  Network  Protocols IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPNP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPOE Simultaneous Live View Up to 6 channels User/Host level Up to 32 users, 3 levels: Administrator, Operator, User Security 802.1x(EAP-MDS, EAP-TLS), access control, IP address filtering Client iVMS-4800  Interface  Alarm Input 1, alarm input (0-3.3 VDC) Alarm Output 1, alarm output; NC, level quantity	Temperature Accuracy	Max (± 2 °C, ± 2%)
Line 1 User Presets Area 7 User Presets Color Alarm (Isotherm) Above/Between/Below Thermographic Integration Temperature Metadata Continuous output data of preset thermographic rules and measured temperature Thermographic Data Encoding 4 fps, 32-bit 384 × 288 per frame Thermographic Data Upload Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK Raw Data Upload Real-time full-screen YUV data via RTSP and SDK Video and Image Main Stream 50 fps (384 × 288) Video Compression H.264/MJPEG Color Palettes 15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue Digital Zoom 2 ×, 4 ×  Network  Protocols Prot	Measurement Presets	Hot spot, cold spot in real time
Area 7 User Presets Color Alarm (Isotherm) Above/Between/Below Thermographic Integration Temperature Metadata Continuous output data of preset thermographic rules and measured temperature Thermographic Data Encoding 4 fps, 32-bit 384 × 288 per frame Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK Raw Data Upload Real-time full-screen YUV data via RTSP and SDK Video and Image  Main Stream 50 fps (384 × 288) Video Compression H.264/MJPEG Color Palettes 15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue Digital Zoom 2 × 4 ×  Network  Protocols RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE Simultaneous Live View Up to 6 channels User/Host level Up to 32 users, 3 levels: Administrator, Operator, User Security User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering Client iVMS-4800  Interface  Alarm Input 1, alarm input (0-3.3 VDC) Alarm Output 1, alarm output; NC, level quantity	Point	10 User Presets
Thermographic Integration Temperature Metadata Continuous output data of preset thermographic rules and measured temperature Thermographic Data Encoding 4 fps, 32-bit 384 × 288 per frame Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK Raw Data Upload Real-time full-screen YUV data via RTSP and SDK Video and Image Main Stream 50 fps (384 × 288) Video Compression H.264/MJPEG Color Palettes 15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue Digital Zoom 2 × ×  Network  Protocols IPV4/IPV6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPPP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE Simultaneous Live View Up to 6 channels User/Host level Up to 32 users, 3 levels: Administrator, Operator, User Security User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering Client iVMS-4800 Interface Alarm Input 1, alarm input (0-3.3 VDC) Alarm Output 1, alarm output; NC, level quantity	Line	1 User Presets
Thermographic Integration  Temperature Metadata Continuous output data of preset thermographic rules and measured temperature dependence of the prographic Data Encoding A fps, 32-bit 384 × 288 per frame  Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK  Raw Data Upload Real-time full-screen YUV data via RTSP and SDK  Video and Image  Main Stream 50 fps (384 × 288)  Video Compression H.264/MJPEG  Color Palettes 15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue  Digital Zoom 2 × 4 ×  Network  Protocols IPV4/IPV6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE  Simultaneous Live View Up to 6 channels  User/Host level Up to 32 users, 3 levels: Administrator, Operator, User  Security User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering  Client iVMS-4800  Interface  Alarm Input 1, alarm input (0-3.3 VDC)  Alarm Output 1, alarm output; NC, level quantity	Area	7 User Presets
Temperature Metadata Continuous output data of preset thermographic rules and measured temperature Thermographic Data Encoding 4 fps, 32-bit 384 × 288 per frame  Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK  Raw Data Upload Real-time full-screen YUV data via RTSP and SDK  Video and Image  Main Stream 50 fps (384 × 288)  Video Compression H.264/MJPEG  Color Palettes 15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue  Digital Zoom 2 × 4 ×  Network  Protocols IPV4/IPV6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE  Simultaneous Live View Up to 6 channels  User/Host level Up to 32 users, 3 levels: Administrator, Operator, User  Security User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering  Client iVMS-4800  Interface  Alarm Input 1, alarm input (0-3.3 VDC)  Alarm Output 1, alarm output; NC, level quantity	Color Alarm (Isotherm)	Above/Between/Below
Thermographic Data Encoding Thermographic Data Upload Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK Raw Data Upload Real-time full-screen YUV data via RTSP and SDK  Video and Image Main Stream 50 fps (384 × 288) Video Compression H.264/MJPEG Color Palettes 15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue Digital Zoom 2 ×, 4 ×  Network  Protocols IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE Simultaneous Live View Up to 6 channels User/Host level Up to 32 users, 3 levels: Administrator, Operator, User Security User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering Client iVMS-4800 Interface Alarm Input 1, alarm input (0-3.3 VDC) Alarm Output 1, alarm output; NC, level quantity	Thermographic Integration	
Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK  Raw Data Upload Real-time full-screen YUV data via RTSP and SDK  Video and Image  Main Stream 50 fps (384 × 288)  Video Compression H.264/MJPEG  Color Palettes 15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue  Digital Zoom 2 × 4 ×  Network  Protocols IPV4/IPV6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPOE  Simultaneous Live View Up to 6 channels  User/Host level Up to 32 users, 3 levels: Administrator, Operator, User  Security User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering  Client iVMS-4800  Interface  Alarm Input 1, alarm input (0-3.3 VDC)  Alarm Output 1, alarm output; NC, level quantity	Temperature Metadata	Continuous output data of preset thermographic rules and measured temperature
ISAPI, and SDK  Raw Data Upload Real-time full-screen YUV data via RTSP and SDK  Video and Image  Main Stream 50 fps (384 × 288) Video Compression H.264/MJPEG 15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue Digital Zoom 2 ×, 4 ×  Network  Protocols IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE Simultaneous Live View Up to 6 channels User/Host level Up to 32 users, 3 levels: Administrator, Operator, User Security User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering Client Interface Alarm Input 1, alarm input (0-3.3 VDC) Alarm Output 1, alarm output; NC, level quantity	Thermographic Data Encoding	4 fps, 32-bit 384 × 288 per frame
Video and ImageMain Stream50 fps (384 × 288)Video CompressionH.264/MJPEGColor Palettes15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark BlueDigital Zoom2 ×, 4 ×NetworkIPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPP0ESimultaneous Live ViewUp to 6 channelsUser/Host levelUp to 32 users, 3 levels: Administrator, Operator, UserSecurityUser authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filteringClientiVMS-4800InterfaceAlarm Input1, alarm input (0-3.3 VDC)Alarm Output1, alarm output; NC, level quantity	Thermographic Data Upload	
Main Stream 50 fps (384 × 288)  Video Compression H.264/MJPEG  Color Palettes 15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue  Digital Zoom 2 ×, 4 ×  Network  Protocols IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE  Simultaneous Live View Up to 6 channels  User/Host level Up to 32 users, 3 levels: Administrator, Operator, User  Security User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering  Client iVMS-4800  Interface  Alarm Input 1, alarm input (0-3.3 VDC)  Alarm Output 1, alarm output; NC, level quantity	Raw Data Upload	Real-time full-screen YUV data via RTSP and SDK
Main Stream 50 fps (384 × 288)  Video Compression H.264/MJPEG  Color Palettes 15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue  Digital Zoom 2 ×, 4 ×  Network  Protocols IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE  Simultaneous Live View Up to 6 channels  User/Host level Up to 32 users, 3 levels: Administrator, Operator, User  Security User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering  Client iVMS-4800  Interface  Alarm Input 1, alarm input (0-3.3 VDC)  Alarm Output 1, alarm output; NC, level quantity	Video and Image	
Color Palettes  15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue  2 x, 4 x  Network  Protocols  IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE  Simultaneous Live View  Up to 6 channels  User/Host level  Up to 32 users, 3 levels: Administrator, Operator, User  Security  User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering  Client  iVMS-4800  Interface  Alarm Input  1, alarm input (0-3.3 VDC)  Alarm Output  1, alarm output; NC, level quantity	Main Stream	50 fps (384 × 288)
Color Palettes  Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue  2 x, 4 x  Network  Protocols  IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE  Simultaneous Live View  Up to 6 channels  User/Host level  Up to 32 users, 3 levels: Administrator, Operator, User  User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering  Client  iVMS-4800  Interface  Alarm Input  1, alarm input (0-3.3 VDC)  Alarm Output  1, alarm output; NC, level quantity	Video Compression	H.264/MJPEG
Color Palettes  Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue  2 x, 4 x  Network  Protocols  IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE  Simultaneous Live View  Up to 6 channels  User/Host level  Up to 32 users, 3 levels: Administrator, Operator, User  User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering  Client  iVMS-4800  Interface  Alarm Input  1, alarm input (0-3.3 VDC)  Alarm Output  1, alarm output; NC, level quantity	Color Palettes	15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2,
Network  Protocols  IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE  Simultaneous Live View  Up to 6 channels  User/Host level  Up to 32 users, 3 levels: Administrator, Operator, User  User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering  Client  Interface  Alarm Input  1, alarm input (0-3.3 VDC)  Alarm Output  1, alarm output; NC, level quantity		
Protocols  IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE  Simultaneous Live View  Up to 6 channels  User/Host level  Up to 32 users, 3 levels: Administrator, Operator, User  User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering  Client  iVMS-4800  Interface  Alarm Input  1, alarm input (0-3.3 VDC)  Alarm Output  1, alarm output; NC, level quantity	Digital Zoom	2 ×, 4 ×
Protocols  RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE  Simultaneous Live View  Up to 6 channels  User/Host level  Up to 32 users, 3 levels: Administrator, Operator, User  User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE  802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering  Client  iVMS-4800  Interface  Alarm Input  1, alarm input (0-3.3 VDC)  Alarm Output  1, alarm output; NC, level quantity	Network	
Simultaneous Live View  Up to 6 channels  User/Host level  Up to 32 users, 3 levels: Administrator, Operator, User  User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE  802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering  Client  iVMS-4800  Interface  Alarm Input  1, alarm input (0-3.3 VDC)  Alarm Output  1, alarm output; NC, level quantity	Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE
User/Host level  Security  User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering  Client  iVMS-4800  Interface  Alarm Input  1, alarm input (0-3.3 VDC)  Alarm Output  1, alarm output; NC, level quantity	Simultaneous Live View	
Security  User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering  Client iVMS-4800  Interface  Alarm Input 1, alarm input (0-3.3 VDC)  Alarm Output 1, alarm output; NC, level quantity		·
Security  802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering  Client  iVMS-4800  Interface  Alarm Input  1, alarm input (0-3.3 VDC)  Alarm Output  1, alarm output; NC, level quantity	·	
Interface  Alarm Input	Security	
Alarm Input 1, alarm input (0-3.3 VDC) Alarm Output 1, alarm output; NC, level quantity	Client	iVMS-4800
Alarm Output 1, alarm output; NC, level quantity	Interface	
	Alarm Input	1, alarm input (0-3.3 VDC)
Analog Output 1, CVBS output	Alarm Output	1, alarm output; NC, level quantity
U i i Trans	Analog Output	1, CVBS output



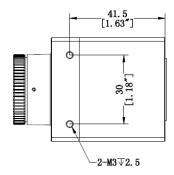
Communication Interface	1, RJ45 10 M/100 M self-adaptive Ethernet interface 1, RS-485 interface (ModBus available)	
General		
Menu Language	English	
Power Supply	10-30 VDC, Max. 2.3 W	
Working Temperature/Humidity	- 20 °C to 50 °C (- 4 °F to 122 °F)	
	90% or less	
Protection Level	IP40	
Mount	M3	
Weight	Approx. 140 g (0.31 lb)	
Dimensions	67 mm × 45 mm × 45 mm (2.64" x 1.77" x 1.77")	

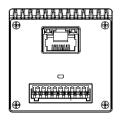
### Available Model

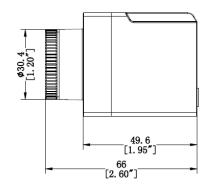
HM-TD2037T-10/X

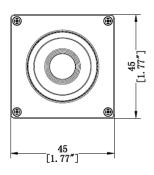


### Dimension









Unit:mm[Inch]

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