SPECIFICATIONS

Digital I/O connector type
>   6-pole jackable screw terminal

Digital Inputs
>   2 opto-isolated, 10–30 VDC

Digital Output Purpose
>   Output to ext. device (programmatically set)

Digital Outputs
>   2 opto-isolated, 10–30 VDC, max 100 mA

EMC
>   EN 61000-6-2:2001 (Immunity), EN 61000-6-3:2001 (Emission), FCC 47 CFR Part 15
>   Class B (Emission)

f-number
>   1.0

Image Frequency
>   50 Hz (100/200 Hz with windowing)

Thermal Sensitivity/NETD
>   < 0.05°C @ +30°C (86°F) / 50 mK

Accuracy
>   ±2°C or ±2% of reading

COMMUNICATION & DATA STORAGE

Digital I/O connector type
>   6-pole jackable screw terminal

Digital I/O isolation voltage
>   500 VRMS

Digital I/O supply voltage
>   12/24 VDC, max 200 mA

Digital input purpose
>   Image tag (start, stop, general), Image flow ctrl. (Stream on/off), Input ext. device
>   (programmatically read)

Digital Inputs
   2 opto-isolated, 10–30 VDC

Digital Output Purpose
   Output to ext. device (programmatically set)

Digital Outputs
   2 opto-isolated, 10–30 VDC, max 100 mA

Ethernet
   Control and image

Ethernet Communication
   TCP/IP socket-based FLIR proprietary and GenICam protocol

Ethernet Connector Type
   RJ-45

Ethernet Image Streaming
   16-bit 640 × 480 pixels at 50 Hz, 16-bit 640 × 240 pixels at 100 Hz, 16-bit 640 × 120 pixels at 200 Hz (Signal linear, Temperature linear, Radiometric GigE Vision and GenICam compatible)

Ethernet Protocols
   TCP, UDP, SNTP, RTSP, RTP, HTTP, ICMP, IGMP, ftp, SMTP, SMB (CIFS), DHCP, MDNS (Bonjour), uPnP

Ethernet Standard
   IEEE 802.3

Ethernet Type
   Gigabit Ethernet

USB
   Control and image

USB - Communication
   TCP/IP socket-based FLIR proprietary

USB - Connector Type
   USB Mini-B

USB - Image Streaming
   16-bit 640 × 480

USB - Protocols

TCP, UDP, SNTP, RTSP, RTP, HTTP, ICMP, IGMP, ftp, SMTP, SMB (CIFS), DHCP, MDNS (Bonjour), uPnP

USB - Standard
    USB 2 HS

IMAGING & OPTICAL

Camera size excl lens (L x W x H)
    $203 \times 73 \times 75$ mm ($8.0 \times 2.9 \times 3.0$ in.)

Detector Pitch
    17 µm

Detector Time Constant
    Typical 8 ms

Field of view (FOV)
    $15° \times 11°$ (19° diagonal)

FLIR Screen-EST Mode
    No

f-number
    1.0

Focal Length
    41.3 mm (1.63 in.)

Focus
    Automatic or manual (built in motor)

Image Frequency
    50 Hz (100/200 Hz with windowing)

IR Resolution
    640×480 pixels

Lens Identification
    Automatic

Minimum Focus Distance
    0.50 m (1.64 ft.)

Spatial resolution (IFOV)
    0.41 mrad

Thermal Sensitivity/NETD
    < 0.05°C @ +30°C (86°F) / 50 mK

MEASUREMENT & ANALYSIS

Accuracy
    ±2°C or ±2% of reading

Atmospheric transmission correction
    Automatic, based on inputs for distance, atmospheric temperature and relative humidity

Camera size (L x W x H)
    222 × 73 × 75 mm (8.7 × 2.9 × 3.0 in.)

Emissivity Correction
    Variable from 0.01 to 1.0

External Optics & Windows Correction
    Automatic, based on input of optics/window transmission and temperature

Measurement Corrections
    Global object parameters

Object Temperature Range
    -20 to +150°C +100 to +650°C +300 to +2000°C

Optics Transmission Correction
    Automatic, based on signals from internal sensors

Reflected apparent temperature correction
    Automatic, based on input of reflected temperature

GENERAL

Contents
    Hard transport case or cardboard box, Thermal imaging camera with lens, Utility CD-ROM, Calibration certificate, Ethernet™ cable, USB cable (FLIR A615), Mains cable, Power cable (pig-tailed), Power supply, Printed Getting Started Guide, Printed Important Information Guide, User documentation CD-ROM, Warranty extension card or Registration card, 6-pole screw terminal (mounted on camera)

Housing material
    Aluminium

Packaging Size
    360 x 180 x 550 mm (14.2 x 7.1 x 21.7 in.)

ENVIRONMENTAL & CERTIFICATIONS

EMC
> EN 61000-6-2:2001 (Immunity), EN 61000-6-3:2001 (Emission), FCC 47 CFR Part 15 Class B (Emission)

Encapsulation
> IP 30 (IEC 60529)

Humidity (Operating and Storage)
> IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (77 to 104°F)

Operating Temperature Range
> –15°C to +50°C (+5°F to +122°F)

Shock
> 25 g (IEC 60068-2-27)

Storage Temperature Range
> –40°C to +70°C (-40 to 158°F)

Vibration
> 2 g (IEC 60068-2-6)

POWER

External Power Connector Type
> 2-pole jackable screw terminal

External Power Operation
> 12/24 VDC, 24 W absolute max

Voltage
> Allowed range 10–30 VDC