



Thermoscreen IS640 Specifications

System Component List

- Optotherm IS640 thermal imaging camera (see specs below)
- Camera macroscopic lens (see specs below)
- Camera Link video board (Matrox eCI PCIe)
- Camera Link cable (3m)
- Optotherm Thermalyze fever screening software (multithreading application)
- Lens cleaning kit
- Dell computer (see specs below)
- Visual camera (see specs below)
- PoE cable (3m)
- Dual camera enclosure
- Mobile stand (see specs below)
- Screening floor mat
- Thermoscreen assembly toolkit
- Thermoscreen user manual

System

Ambient Operating	15 to 35°C
Ambient Storage	-20 to 60°C
Power Requirements	100/240 VAC 50/60 Hz

IS640 Thermal Imaging Camera

Detector	Uncooled amorphous silicon
Array Size	640 x 480
Pixel Pitch	17 μ m
Wavelength Range	7 – 14 μ m
Frame Rate	60 Hz
Data Interface	Base Camera Link
Communication Interface	Serial over Camera Link
Power	12 V PoCL (Power over Camera Link)

Lens

Field of View	48 x 38°
Screening Area	181 x 136 cm
Screening Distance	2 meters
Focus	Manual
Working Distance	100 mm to infinity
Focal Length	12 mm
Working F/#	1.02

Measurement

Calibration Range	0 to 80°C
Sensitivity (NETD) *	< 40 mK
Accuracy	+/-0.3°C between 30 to 40°C +/-1°C otherwise

* Noise Equivalent Temperature Difference (NETD) specifies the smallest temperature difference that can be detected.

Visual Camera

Array Size	1280 x 1024 (color)
Frame Rate	60 Hz
Lens	Vari-focal lens
Communication Protocol	GigE
Power	PoE (Power over Ethernet)

Dell PC

Model	Dell Optiplex 7070
Form Factor	Mini Tower
RAM	16 GB
Hard Drive	1 TB
Monitor	Dell Ultrasharp 25"
Speaker	Dell USB sound bar
Graphics board	PCIe
Keyboard	Dell standard
Mouse	Dell standard

Dual Camera Enclosure

Material	Aluminum (Anodized)
Dimensions	355 L x 180 W x 125 H [mm]
Weight	5 kg

Mobile Stand

Material	Aluminum (Anodized)
Dimensions	185 height x 70 cm base
Weight	13 kg
Wheels	5 (locking)

IS640 Testing and Certifications

EMC Specifications

The IS640 has been subjected to, and been shown to comply with, the EMC (Electromagnetic Compatibility) tests listed below in accordance with the requirements of the following specifications:

- IEC 60601-1-2 (4th Edition 2014 07): Medical electrical equipment – Part 1-2: General requirements for basic safety and essential performance – Collateral Standard: Electromagnetic disturbances – Requirements and tests
- EN 61000-6-1:2007: Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity standard for residential, commercial and light-industrial environments
- EN 61000-6-3:2007/A1:2011: Electromagnetic compatibility (EMC) – Part 6-3: Generic standards – Emission standard for residential, commercial and light-industrial environments
- EN 61326-1:2013: Electrical equipment for measurement, control and laboratory use - EMC requirements Part 1: General requirements

EMC Tests Performed

- EN 55011:2009 - Radiated Emissions - Class B 30MHz - 1GHz
- EN 61000-4-2:2008 - Electrostatic Discharge Immunity - 2kV, 4kV, 8kV, 15kV (Air), 8kV (contact)
- EN 61000-4-3:2010 - Radiated Electromagnetic Field Immunity - 80MHz to 2.7GHz @ 10V/m 80% AM @ 1kHz
- EN 61000-4-3:2010 - Proximity Fields from RF Wireless - 80MHz to 2.7GHz @ 10V/m 80% AM @ 1kHz
- EN 61000-4-4:2012 - Fast Transient/Burst Immunity - I/O Lines (1kV)
- EN 61000-4-6:2013 - Conducted RF Immunity - 3Vrms (150kHz - 80MHz)
- EN 61000-4-8:2009 - Magnetic Field Immunity - 30A/m @ 50Hz & 60Hz