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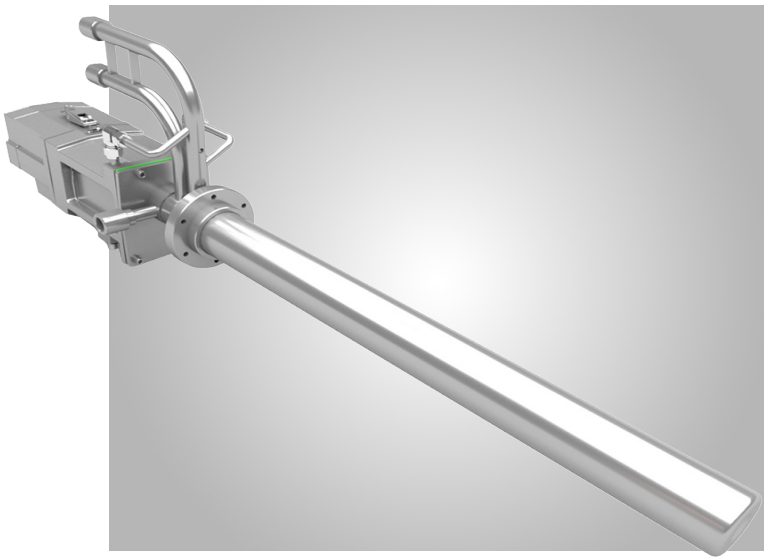


MWIR-b-640

Thermal imaging solutions

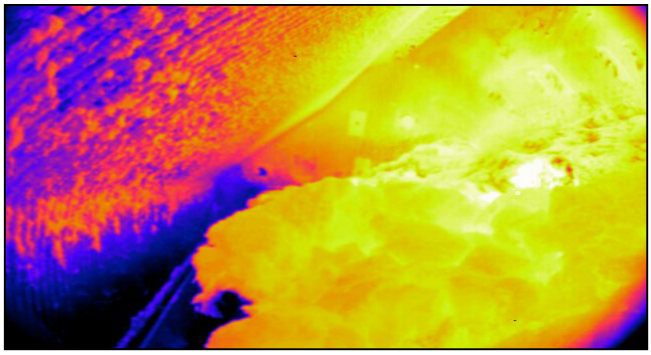
Combustion atmospheres with luminous flames require a thermal imaging solution with advanced spectral filtering and high resolution to deliver clear live images from within a furnace, boiler or incinerator.

The MWIR-b-640 offers a clear view through flames and hot furnace atmospheres, unlike visual and Near-IR cameras. It enables precise, radiometric temperature measurements that can be recorded and monitored over the furnace or boiler's lifetime.

The advanced ImagePro software enables long-term data trending and early detection of tube leaks and temperature variations, optimizing processes. It provides operators with a clear view of critical furnace or boiler areas, measuring over 300,000 accurate point temperatures within ranges of 300-1200 °C or 500-1800 °C. The ImagePro software's advanced digital communications allow real-time monitoring of performance, identifying hot and cold areas, and viewing uneven heating from the safety of the control room.

The MWIR-b-640's high-resolution imaging and 90° field-of-view enable simultaneous measurement of multiple areas, making it essential for optimising production, reducing energy consumption, and extending boiler or furnace life.

MWIR-b-640 is a highly accurate infrared borescope imaging camera for temperature measurement in furnace profiling applications.



FEATURES & BENEFITS

- **Advanced spectral filtering** enables a clear view through dusty and hot furnace atmospheres.
- **Patented** background reflection compensastion** can correct for the effect of background reflection in real-time enabling accurate target temperature readings.
- **Advanced Image Processing Software** to control, monitor, analyse and capture data from the thermal imaging camera with ImagePro.
- **Safe 24 hour, 7 day monitoring** guarantees accurate, reliable data from a safe, remote position without risk to the operators.
- **Live thermal data combined with high-resolution, low noise image** allows real time furnace optimisation and the opportunity to improve energy efficiency without degrading furnace/boiler lifetime.

See degrees differently.

SPECIFICATIONS

	MWIR-b-640
CAMERA UNIT & HOUSING	
Measurement Range:	300-1200 °C / 572-2192 °F or 500-1800 °C / 932-3272 °F
Pixel Resolution:	640x480
Detector:	FPA - Microbolometer
Spectral Response:	3.9 µm
Frame Rate:	60 fps* / 7.5 fps
Optic (HFOV x VFOV):	90° x 67.5°
Optic (IFOV):	2.4 mrad
Repeatability:	1 °C below 50 °C ambient
Mounting:	Choice of 3” ANSI 150 RF Flange & Gasket or PN16 DN80 Flange & Gasket with a 12” standpipe
Focus Range:	1 m to infinity
Probe Diameter:	Ø 61 mm / Ø 2.4”
Probe Lengths:	305, 609 or 914 mm (12”, 24” or 36”)
Protection Window:	Sapphire
Accuracy:	1 %K
Dimensions:	314 x 460 x 765 mm (or 1070 mm or 1374 mm) 12” x 18” x 30” (or 42” or 54”)
Power Rating:	24 V DC
Weight:	< 25 kg (for 609 mm / 24” version)
Ambient Temperature:	-20 to 60 °C / -4 to 140 °F (0 - 95 % humidity, non-condensing)
Cooling/Purging Options:	Water cooling / Air purging
Environmental Rating:	IP65
CAMERA SUPPLY	
Connections:	Digital data over 1 GBit Ethernet (M12, 8 pin) Power (8 pin)
Alarm Functions:	Tip temperature warning, tip temperature alarm
Signal-LED:	Power, Ethernet, Tip temperature (green/yellow/red)
Service:	Water, instrument air and power input
THERMAL IMAGER POWER SUPPLY	
Components & Connections:	110/230 V AC Wired ethernet connection (standard) / Fibre-optic data connection (option)
IP Rating:	IP65 / NEMA 4
Size:	380 x 380 x 211 mm / 15” x 15” x 8.3”
Weight:	15 kg (33.07 lbs)
IMAGE PROCESSING	
Software:	ImagePro Advanced Image Processing and Controlling Software
Workstation:	PC-Workstation (option)
Interfacing:	Open Data Interface, Modbus TCP/IP, Moxa I/O unit
STANDARD ACCESSORIES	
Accessories (optional):	Power supply, cables, air- or water-cooled mounting and tube, software, workstation, auto-retraction system

*60 Hz instruments are subject to different export restrictions in different authorities and countries around the world. All sales must be subject to export licence review.

**Patent Number: EP3729026

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CONTACT US

WEB: www.ametek-land.com

EMAIL: land.enquiry@ametek.com

We are fully committed to Quality Assurance. See all our accreditations at **AMETEK-LAND.COM/QUALITY**

MARCOMS_DOC-00172 MWIR-b-640 Brochure Rev 2 EN