The BoilerSpection™ MB thermal imaging system uses a special mid-wave infrared detector, allowing operators to better see through flames in a boiler, furnace, kiln, or incinerator. This unique feature means BoilerSpection MB provides the clearest and most stable through-flame images.

With a real-time infrared inspection, plant operators can quickly and accurately identify process abnormalities, allowing for more optimal combustion and heat transfer. Operators can then direct cleaning operations, regulate flow of fuel and air, reduce emissions, reduce fuel consumption, speed up boiler start up, and improve safety.

BoilerSpection MB is a completely digital and IP addressable camera system that utilizes standard connections for viewing and recording real-time images. It also includes a standard video (BNC) output for use with legacy video equipment.

**PRODUCT BENEFITS**

- Mobile or semi-permanent through-flame imaging inside power boilers, furnaces and incinerators
- Pinpoint problems before they cause outages
- Inspect buildup of ash/slag on boiler tubes
- Diagnose burner flame conditions
- Measure temperature across entire image
- Record and analyze data to optimize combustion processes
- Compatible with BoilerSpection SD continuous monitoring solution
Infrared Camera Specifications
- Spectral Wavelength: ~3.9 µm narrowband pass filter
- Resolution: 320 x 240
- Detector Type: Uncooled focal plane array VOx microbolometer
- Speed: 30 Hz / 9 Hz
- Protective Housing: Stainless steel enclosure with vortex air cooling (air is only required for longterm monitoring)
- Measurement Range: 500 to 1600°C (932 to 2912°F)
- Video Out: NTSC / PAL
- Power Supply: Included, input is universal AC
- Camera Weight: < 13.5 kg (30 lb)

Lens Specifications
- Lens Shroud Outer Diameter: 42 mm (1.65”)
- Lens Length: 18” (A” Dimension 15.75” [400 mm])
- 24” (A” Dimension 22.50” [572 mm])
- 36” (A” Dimension 34.10” [866 mm])
- Field of View (H x V): 50° x 38°
- Construction: Stainless Steel Borescope Optics with ZnS optical elements (can be operated without air for brief inspections)
- Protection: Sapphire window tip with air purge shield

Recording and Analysis Software
- Key Features: Image recording, region of interest analysis, export data to Excel, save recordings as JPGs and AVI movies

Base Camera System Components
- BoilerSpection MB Camera with 18”, 24”, or 36” lens
- Removable radiation shield
- Power and Ethernet connection cables
- Software for image recording and analysis
- Camera storage and travel case
- User manual

Available Options
- Battery pack
- Automatic retraction system for continuous monitoring installation

Accessory Kit Components
- 4.5 m (15’) flexible stainless braided air lines with fittings
- Dual stage air filters with regulators
- Industrial grade laptop computer with software pre-installed
- LumaSpec Offline Analyzer
- Accessory kit storage and travel case
- Bottom mounted handle (see below)
DIMENSIONS

All dimensions in mm
ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than three decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

AE’s power solutions enable customer innovation in complex semiconductor and industrial thin film plasma manufacturing processes, demanding high and low voltage applications, and temperature-critical thermal processes.

With deep applications know-how and responsive service and support across the globe, AE builds collaborative partnerships to meet rapid technological developments, propel growth for its customers and power the future of technology.

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