

## High Performance Infrared Camera for Demanding Real-Time Imaging Applications

### MC320

- High performance, cost-effective complete monitoring solution
- Advanced maintenance-free electronics and industrial protective packaging
- Serves the industry's broadest range of process monitoring applications
- Superior images and temperature measurement for long- and mid-wave applications



LumaSense Technologies, Inc., has been an innovative leader in the field of infrared non-contact temperature measurement since 1969. LumaSense specializes in turnkey solutions consisting of complete engineering, design, and installation services to meet the most severe and challenging thermal imaging system requirements.

The MIKRON MC320 represents another milestone in innovative infrared thermometry. Designed with advanced maintenance-free electronics and Industrial Protective Packaging, the MC320 offers unparalleled accuracy for demanding industrial and manufacturing applications.

The MC320 is a cost-effective, high performance non-contact infrared imager that serves a broad range of process monitoring applications. The unique design produces superior images and temperature measurement ( $\pm 2$  °C) for both long- and mid-wave applications.

The MC320 can be configured with flame-filtering capability for furnace/kiln monitoring. With an unmatched array of protective accessories, the MC320 demonstrates LumaSense's commitment to long-term trouble-free process monitoring.

#### Typical Applications:

- Vessels and furnaces
- Rolling processes
- Rotary kilns
- Quality monitoring in glass production

## MC320 Variations

Model	Filter	Range 1 (°F)	Range 2 (°F)	Range 1 (°C)	Range 2 (°C)
MC320L	8 - 14 µm	-40 °F to 248 °F	32 °F to 932 °F	-40 °C to 120 °C	0 °C to 500 °C
MC320HT	8 - 14 µm	392 °F to 2912 °F		200 °C to 1600 °C	
MC320M	3 - 5 µm	302 °F to 932 °F	392 °F to 1472 °F	150 °C to 500 °C	200 °C to 800 °C
MC320MHT	3 - 5 µm	752 °F to 2912 °F		400 °C to 1600 °C	
MC320F	3.9 µm	392 °F to 1472 °F		200 °C to 800 °C	
MC320FHT	3.9 µm	752 °F to 2912 °F		400 °C to 1600 °C	
MC320G	4.8 - 5.2 µm	392 °F to 1472 °F		200 °C to 800 °C	
MC320GHT	4.8 - 5.2 µm	752 °F to 2912 °F		400 °C to 1600 °C	

## Optics

Lens	Field of View	Lens	Field of View
Standard	21° (H) x 16° (V)	2X Telephoto	11° (H) x 8° (V)
XWide (manual focus)	75° (H) x 56° (V)	Close focus	60 µm resolution
Wide	53° (H) x 40° (V)	Boroscope ready	User defined

## Technical Data

### Performance

Measurement Accuracy:	±2 °C or 2% of reading
Image Update Rate:	60 Hz (standard); 9 Hz (E series)
A/D Resolution:	16 bit
Detector:	320 x 240 Uncooled Focal Plane Array
Emissivity Correction:	0.1 to 1.0
Transmittance:	0.1 to 1.0
Sensitivity/NETD:	0.108 °F @ 86 °F (0.06 °C @ 30 °C)

### Optical Specifications

Focus Range:	30 cm to infinity
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### Interface

Analogue:	TV Output (NTSC or PAL)
Digital:	Gigabit Ethernet
Connections:	4-Pin Power (LEMO-0K), RJ45 Ethernet, 3-pin Trigger (M8), Coaxial (BNC)

### Environmental Specifications

Protection Class:	IP54 / NEMA 4
Operating Temperature:	32 to 122 °F (0 °C to 50 °C) (at housing)
Storage Temperature:	-4 to 158 °F (-20 °C to 70 °C)
Relative Humidity:	Non condensing conditions
Weight:	2.55 lbs. (1 kg) (excludes any protective housing or optional lenses)
Operating Position:	Any operating position
Housing:	6063 T5 Aluminum Alloy. Finish is alodine, clear, MIL-DTL-5541F, RoHS Compliant
Dimensions:	3.26 in x 3.20 in x 7.01 in (83 mm x 81.49 mm x 178.28 mm)

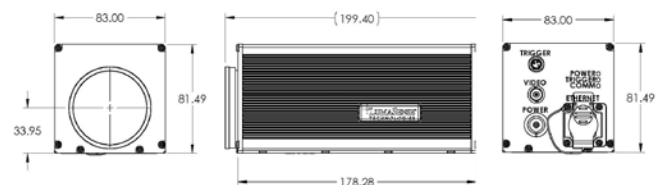
### Electrical

Power Supply:	12 - 30V or Power over Ethernet standards
Power Consumption:	7W Typical, 13W Max
Load (analog output):	75 Ω
Isolation	Power supply, communication, and IOs are isolated from each other

### Scope of delivery:

Includes 2 meter Ethernet crossover cable, 2 meter power supply cable, power supply unit (100 to 240 VAC, 47 to 63 Hz), lens cap, manual (on CD), carrying case., LumaSpec RT Viewer software.

### Dimensions:



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## Temperature and Gas Sensing Solutions

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