

# ThermalSpection 724

## Remote Thermal Monitoring System with Multiple Camera System Functionality



**Multiple camera system functionality allows remote monitoring of temperatures in real time through image data obtained from one or more cameras to a single PC**

**M**ikron's ThermalSpection 724 Remote Thermal Monitoring System represents another milestone in innovative infrared thermometry. With its multiple camera system functionality, it is the first system to allow remote monitoring of temperatures in real time through image data obtained from one or more cameras to a single PC. Designed with advanced maintenance-free electronics and industrial protective packaging, the ThermalSpection 724 system offers unparalleled accuracy for demanding industrial and scientific applications while quickly measuring temperature without contact in even the most adverse environments. With an unmatched array of optional accessories, the ThermalSpection 724 system demonstrates Mikron's commitment to long-term trouble-free operation.

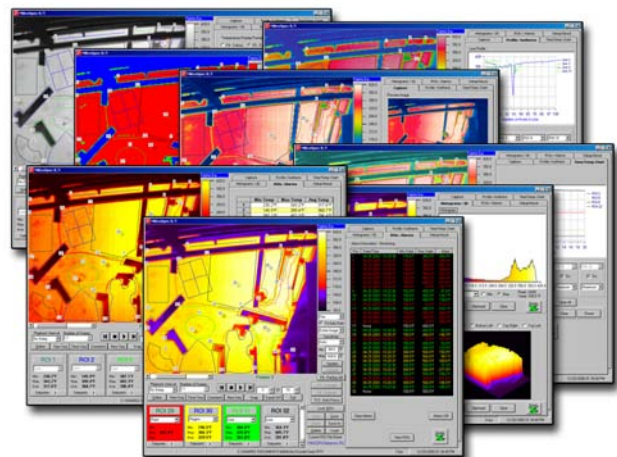


### System Features/Benefits

- High Quality, Real Time Digital Image Transfer via Ethernet or IEEE1394 (Firewire)
- Remote Monitoring via (wired or wireless) Ethernet
- NEMA-4 housing
- Maintenance Free operation
- Control and Alarm Triggering Software with 32 Regions of Interest
- High Accuracy  $\pm 2\%$  or  $2^{\circ}\text{C}$  of reading
- Long Wavelength, Less Affected by Sunlight
- Ambient temperatures to  $100^{\circ}\text{C}$  ( $212^{\circ}\text{F}$ ) with optional cooling
- IR Camera Based on Proven MikroScan 7302
- Remote Pan-And-Tilt capability (optional)
- Multiple Camera System functionality (optional)
- 8-Channel Input/Output Module (optional)

**E**ach thermal imaging camera is mounted in a totally sealed environmental enclosure which contains an IR transparent window and offers continuous cooling from a UL-certified air cooling system. Positive pressure inside the enclosure prevents dirt or dust from entering, even in the harshest conditions. With an optional purge unit, the enclosure can also protect against explosion hazards in areas with possible exposure to volatile gases.

Each camera has an Internet IP address and password protection, offering control from any computer using wired or wireless Ethernet. When utilized with Mikron's MikroSpec™ R/T Thermal Data Acquisition and Analysis software, each camera is capable of monitoring up to 32 Regions of Interest and of being able to record up to 75 minutes of data in real time. Frames can also be captured at intervals rather than continuously, or they can be triggered by temperature alarms tied to individual Regions of Interest or by direct signal from the PC.



MikroSpec R/T Software



## Technical Data:

<b>IR Camera—MikroScan 7302</b>	Detector:	320 x 240 Uncooled Focal Plane Array (Microbolometer)
	Measurement Accuracy:	±2% or 2°C of reading
	Field of View:	29°(H) x 22°(V)
	Focus Range:	30 cm to infinity
	Instantaneous FOV:	1.58 mrad
	Spectral Band:	8.0 to 14.0 μm
	Image Update Rate:	30 Frames/sec or 60 Frames/sec (selectable)
	Sensitivity / NETD:	0.06°C @ 30°C
A/D Resolution:	14 bit	
<b>Interfaces</b>	Communication:	Ethernet, IEEE1394
	Video Output:	NTSC/PAL, S-Video
<b>OnLine Thermal Image Processing Software</b>	Presentation:	In run mode the system displays a live thermal image on the screen in 256 colors. Images can also be frozen.
	Remote Camera Control Functionality	Allows you to select the camera type, mode, range, temperature scale and lens. Also allows adjustments to be made for focusing, emissivity, ambient calibration, and percentage of transmission loss.
	Real-time Image Acquisition	Allows large amount of data to be capture at user-adjustable capture rate.
	Multiple Regions of Interest (ROIs)	Process and compute the minimum, maximum and average temperatures for up to 32 Regions of Interest (ROIs) defined in a variety of shapes.
	Multiple Color Palettes	Offer flexibility for optimal image clarity.
Off-Line Analysis	Replay and analyze image sequence files that have been previous captured and saved to disk.	
<b>Housing</b>	NEMA-4 Enclosure with Mounts	Includes IR Transparent Window, interface connections, power termination strip, vortex air cooler with thermostat control or optional solid state air conditioner or heater with thermostat control
<b>Environmental</b>	Operating Temperature:	-15°C to 50°C
	Storage Temperature:	-40°C to 70°C
	Shock Resilience:	30G (IEC60068-2-29/JIS C 0042)
	Vibration Resilience:	3G (IEC60068-2-6/JIS C 0040)
<b>Electrical</b>	Power Supply:	120 VAC 5 Amps Max Standard (10 Amps with Pan & Tilt)
<b>Physical Characteristics</b>	Dimensions:	8.5" (H) x 29" (L) x 10.625" (OD) (excluding projections)
	Weight:	approximately 60 lb.

Mikron reserves the right to change specifications to reflect the latest changes in technology and improvements at any time without notice. These changes will be reflected in subsequent editions of our literature when warranted.

## Optional Equipment

### 8-Channel Input/Out Modules

Relay Output (Alarms) Module	Offers 8 relay channels with each channel driving up to 240VAC at 3 Amps
Universal Input (Remote Triggering) Module	Offers 8 channels with each channel ranging from 5 VDC to 240 VAC
4-20 mA Output Module	Offers 8 channels allowing MikroSpec R/T software to send each Region of Interest temperature to a 4-20mA output.
4-20 mA Input Module	Offers 8 channels allowing the MikroSpec R/T software to store external signals with captured temperature data.

### MikroSpec R/T Multiple IR Camera System Package

The MikroSpec R/T Multiple IR Camera System Package is a unique software add-on that allows data obtained from up to 14 cameras to be monitored simultaneously in real-time on a single computer.

### Lenses

The MikroScan 7302 is supplied with a standard lens offering a 29°(H) x 22°(V) field of view. Optional Telephoto and Wide Angle lenses are also available at an additional cost.

### Remote-Controlled Pan/Tilt Head

A remote-controlled pan-and-tilt head is available at an additional cost.

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