An Innovative Concept
Industrial and scientific applications often require continuous and precise monitoring of target temperature. Although most of today’s high quality infrared thermometers offer through lens sighting for pinpointing the desired target area, changes to this area can occur due to vibration or expansion. These factors along with soot, dust and other contaminant buildup result in inaccurate temperature readings. And, since sensors are frequently mounted in hard to reach areas, operators are often unaware of these changes.

Mikron’s innovative SV Series of infrared thermometers overcomes these potential shortcomings by incorporating a non-parallax video optical system into its proven and reliable M67SV, M77SV and M770SV infrared thermometers.

Precision pinpointing of small targets is accomplished by viewing the target on a standard video monitor.

M67SV Sighting Video System
The M67SV non-contact, 2-wire infrared temperature sensors integrate exclusive, advanced electronic design with optical and mechanical precision. The M67SV is completely self-contained and it can withstand the most punishing conditions found in industry.

Remote Video Monitoring is Easy
Mikron’s M67SV, M77SV and M770SV can be connected to any standard RS-170 video monitor by a single wire connected to a BNC connector. This permits remote monitoring of the exact condition of a target from a control room or anywhere else in the plant. No need for maintenance personnel to periodically check the instrument for blockages.
M77SV and M770SV 2-Color Infrared Temperature Sensors with Video Monitoring Capability

Designed for temperature measurement above 350°C (500°F), the M77SV temperature sensors have all of the features of the M67SV and also utilize the 2-color principle. Temperature measurement is made by ratioing the radiation intensities of two adjacent wavelengths rather than from absolute intensity as with single band (or single color) instruments.

Benefits of 2/color Thermometry

The 2-color design eliminates a number of factors that degrade the accuracy of conventional instruments. With the analog M77SV and the digital M770SV temperature measurements are:

- Independent of emissivity
- Unaffected by dust, smoke and other contaminants in the field of view
- Unaffected by dirty viewing windows
- Unaffected by moving target within the field of view

Areas of Application

Mikron M67SV and M77SV have universal application. They have been used successfully in the cement, ceramic, chemical, CVD and crystal growing, food, glass, heat treating, metals, paper, plastics, power, printing, petrochemical, rubber, semiconductor, steel, foundry, induction heating, gas temperature and textile industries.

Instrument Specifications

For detailed specifications see M67, M77 and M770 Brochures.

Optional Video Monitor

Mikron offers a 12” monochrome video monitor which provides crisp, high resolution video images. This compact unit is housed in a rugged steel cabinet with a convenient built-in carrying handle. The monitor complies with UL, TUV and CSA standards and meets the requirements of an FCC Class A computing device.

Monitor Specifications

- Input Voltage: 120 V, 60 Hz
- Power Consumption: 30 W
- Safety Standard: UL, TUV and CSA
- Radio Emission standard: FCC ClassA
- Front Panel Controls: Power ON/OFF with LED indicator
  - Contrast adjustment
  - Brightness adjustment
  - Vertical hold
- Video Input: BNC connector: RS170
- Video Output: BNC connector
- Power Cable: 3-conductor SVT VW-1 18 AWG cable with grounding plug.
- Dimensions: Height: 11.96 in. (30.4cm) Width: 12.2 in. (31.0cm) Depth: 12.43 in. (31.6cm)
- Weight: 20.9 lbs. (9.5kg)
- Shipping Dimensions: Height: 15.1 in. (38.4cm) Width: 14.9 in. (37.8cm) Depth: 14.75 in. (37.5cm)
- Shipping Weight: 21.7 lbs. (9.8kg)
- Shipping Volume: 1.9 ft³ (0.05m³)

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.