

# LUMEX Lead/Selenide Detectors and Sensors



Lumex's high-performance MicronSensIR Infrared Emitters, combine a high-speed pulsable emitter with its corresponding drive electronics on a compact 14 pin circuit board. Designed to maximize output over a 1 Hz to 200 Hz range of pulse speeds, these complementary assemblies enhance signal to noise performance, while minimizing the overall system footprint.

The construction and implementation of the emitter and control circuitry, optimize performance by matching the drive waveform for the desired operating frequency. This ensures peak output temperatures at all pulse frequencies and promotes the highest output for any application. With typical pulse speeds of 180 Hz and 50% modulation depth, even trace elements in low parts per million concentrations can be accurately detected.

The MicronSensIR Infrared Emitters sub-system is an ideal solution for a variety of applications. The control circuitry will exploit the capabilities of the high-speed source in any application, pulsed or steady state. With this emitter and controller set, designers can now focus on maximizing the overall system performance rather than interfacing with the source.

**Features:**

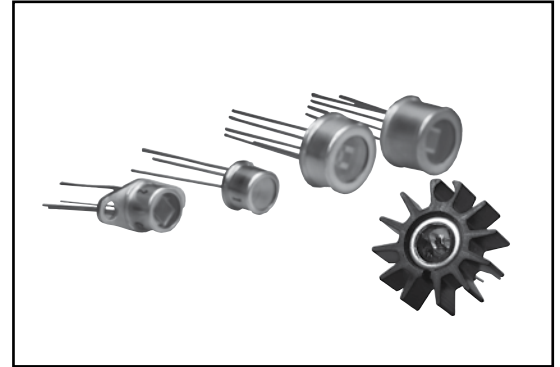
- Industry-leading sensitivity of 1.5E10 Jones across the 1 to 5.5 micron infrared spectrum
- Available in off-the-shelf and customizable formats
- The MicronSensIR family of Detectors offers significant opportunities for cost reduction and design simplification reducing the need for multiple individual detectors and complex optics
- MicronSensIR Emitters high-speed infrared source combines a high-performance pulsable emitter with corresponding drive electronics. Designed to maximize output over 1 Hz to 200 Hz pulse rates, this source-driver combination optimizes system signal to noise performance while minimizing the overall footprint

**Applications:**

- Gas analysis and detection
- Greenhouse gas monitoring
- Fire and spark detection
- Flame monitoring
- Emission monitoring
- Process and quality control

**Market:**

- Medical
- Environmental
- Industrial Safety
- Rail Safety
- Automotive and Aviation
- Underground and Tunnel Safety



For quantities greater than listed, call for quote.

| MOUSER STOCK NO. | Lumex Part No. | Description                | Price Each |        |        |        |
|------------------|----------------|----------------------------|------------|--------|--------|--------|
|                  |                |                            | 1          | 5      | 10     | 25     |
| 696-SNR-40013    | SNR-40013      | Ambient PbS 1x1 Detector   | 127.09     | 125.00 | 120.00 | 118.01 |
| 696-SNR-40147    | SNR-40147      | Cooled PbS 3x3 Detector    | 564.08     | 523.78 | 488.87 | 465.00 |
| 696-SNR-40029    | SNR-40029      | HP Cooled PbS 3x3 Detector | 702.31     | 652.14 | 608.67 | 608.67 |
| 696-SNR-40135    | SNR-40135      | Ambient PbS 2x2 Detector   | 176.13     | 163.55 | 152.65 | 145.00 |
| 696-SNR-40059    | SNR-40059      | Cooled PbS 2x2 Detector    | 460.41     | 427.53 | 399.02 | 399.00 |
| 696-SNR-40186    | SNR-40186      | HP Cooled PbS 2x2 Detector | 703.42     | 653.18 | 609.63 | 609.60 |
| 696-SNR-40642    | SNR-40642      | 4 Element PbSe Detector    | 347.80     | 322.96 | 301.43 | 285.00 |
| 696-SNR-40636    | SNR-40636      | Pulsed Emitter with Driver | 362.34     | 303.30 | 283.08 | 275.00 |
| 696-SNR-40633    | SNR-40633      | Integrated Detector        | 737.98     | 685.27 | 639.58 | 625.00 |