Boston Electronics

Detect • Measure • Control

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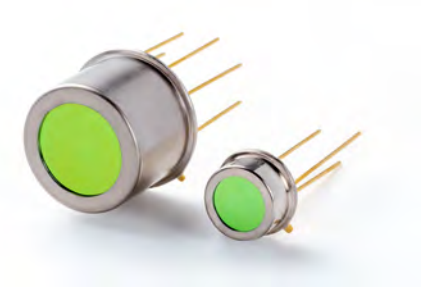
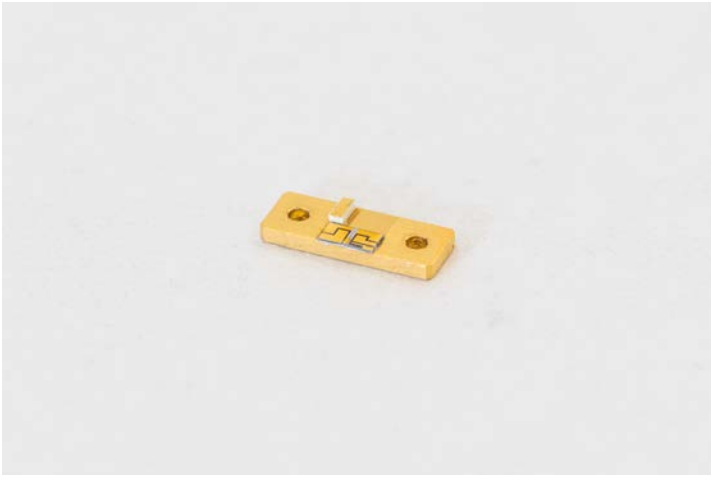
Fast, Sensitive IR & THz Detectors



Room Temp, TE Cooled and Cryo

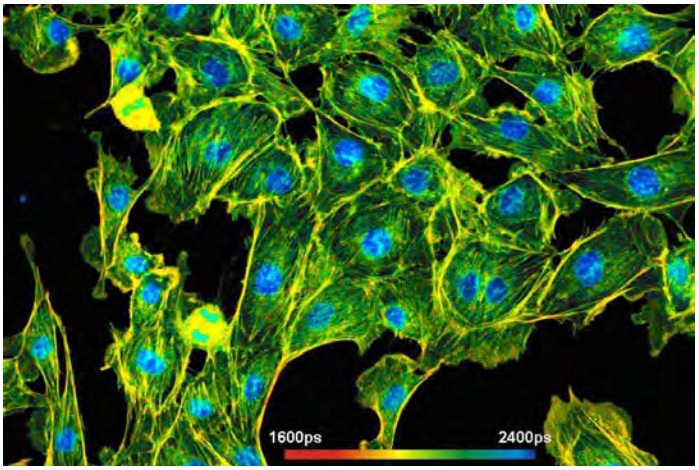
- IR to THz wavebands
- InAsSb and InAs
- Thermopiles
- up to >20 GHz bandwidth
- Integrated preamplifiers
- Arrays/IDCA - Integrated Dewar Coolers
- OEM solutions
- **Heimann, Lytid, AIRS, Hamamatsu**

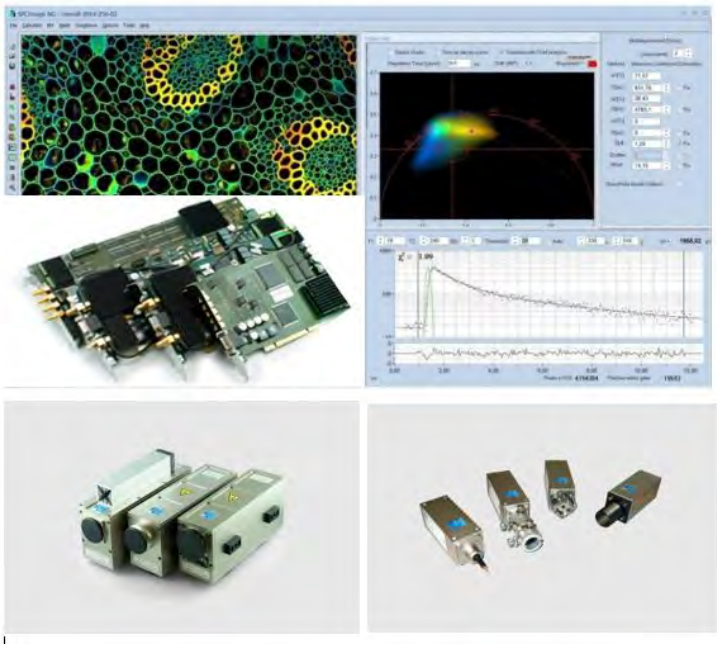
Quantum Cascade Lasers (QCLs) & Extended Cavities



Tunable Lasers – Room Temp and TE Cooled

- Pulsed or CW
- DFBs, FPs
- ICLs
- External Cavity Systems
- Mid-IR 3.2 – 16+ um
- Free space and fiber coupled
- Laser Diodes 1.5-2.2 um
- **Alpes Lasers**
- **Block Engineering**





Photon Counting Solutions

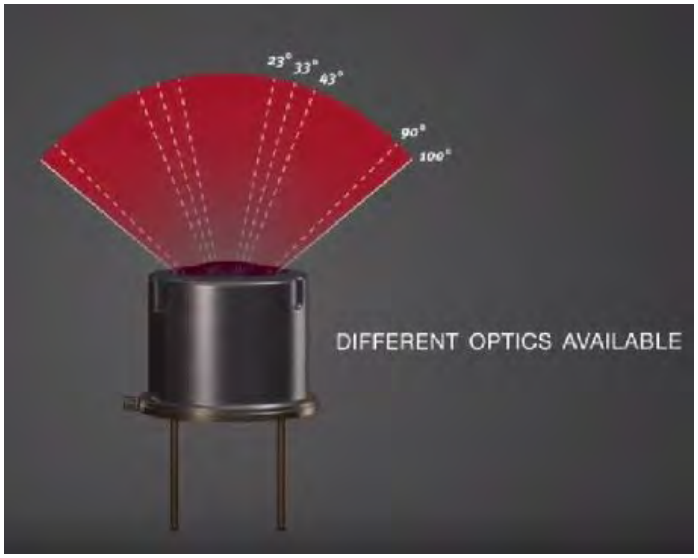
Time-Correlated Single Photon Counting (TCSPC)

- FLIM, PLIM
- Picosecond electronics and lasers
- Photon counting detectors
- Turnkey FLIM systems
- Powerful SPC Image software
- Integration solutions for all major confocal microscopes
- **Becker & Hickl**

DIAL LIDAR

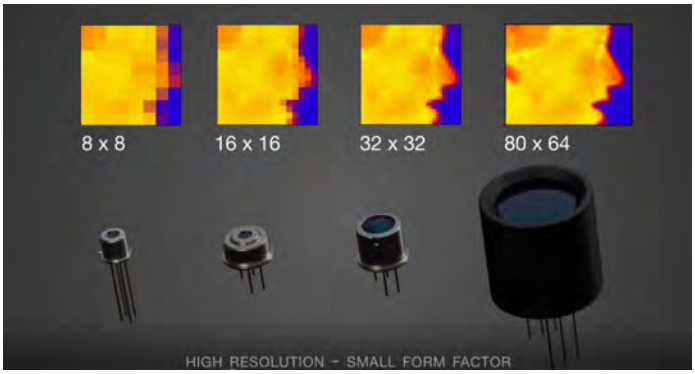
- Optical transient recorders
- Photon counting PMTs
- Silicon APD modules
- **Licel**

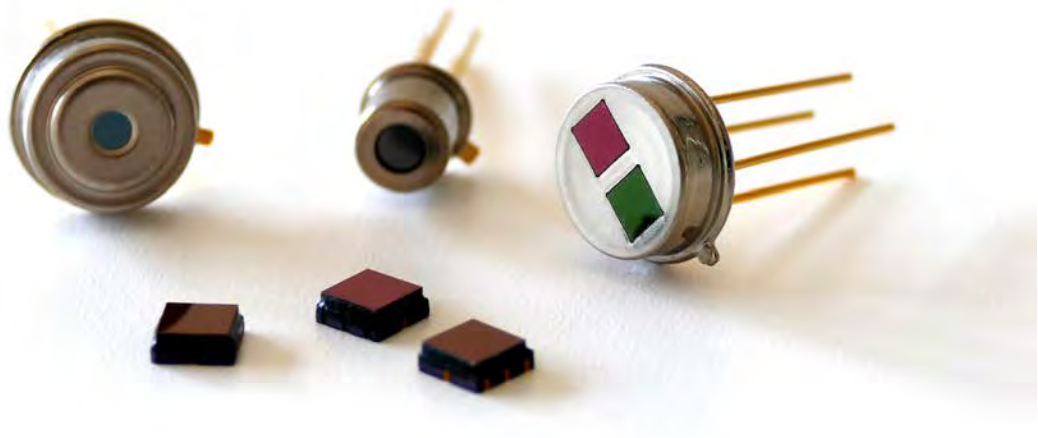
Thermal Imaging Arrays



Low Cost, High Volume
IoT Solutions

- Uncooled thermopile arrays
- Formats from 8x8 to 120x84
- Digital I2C or SPI output
- Compact TO packages
- Integral lens options
- Quick start application kits
- Beam Profilers - IR and THz
- **Heimann Sensors**





Gas and Temperature IR Detectors

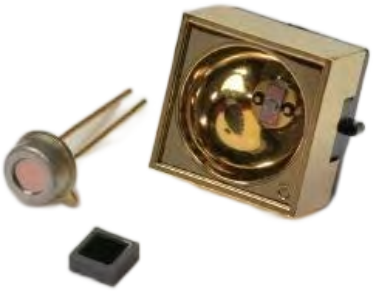
Thermopiles – Room Temperature

- NDIR gas detection
- Integral filters for specific gases
- Single or multi-channel
- Electronics options
- Compact packaging
- Temperature measurements
- High volume
- **Heimann Sensor**

IR Emitters, IR LEDs, & Calibrated Blackbodies

Steady State and Pulsable Sources and LEDs

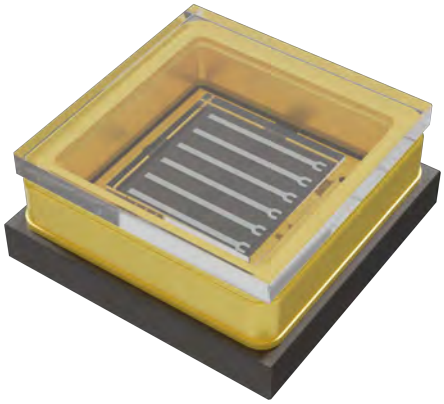
- Broadband Emitters
- Wavelength specific LEDs
- Parabolic optics for collimation
- Elliptical optics for focus
- Optional driver board
- Calibrated cavity and extended source blackbodies
- **HawkEye, Heimann, Hamamatsu, ISDC**



SiC UV Detectors and Sensors

High reliability, high dose

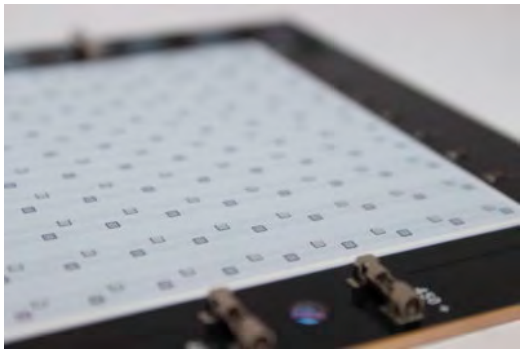
- Deep UV to visible
- Discrete photodiodes
- Amplified sensors (TOCONs)
- Compact TO packages
- Hardened probes
- Robust SiC detectors
- UV radiometers - lab and portable Android
- Certified calibration laboratory
- **sglux**



UVC Light Emitting Diodes - LEDs & Dose Instruments

High power, low cost

- UV LEDs - UVA, UVB, UVC
- Disinfection efficiency
- Standard SMD packaging
- Chip on Board (COB)
- Light bars and arrays
- High reliability
- Heat Sinks / Thermal management
- **Violumas**



THz Imaging and Detection

Imaging cameras and superconducting detectors

Cameras

- 388 x 244 uncooled
- 4 to 0.1 THz (70-3200 um)
- Fast optics f/no < 1.0
- Security, NDT and science applications
- **INO**

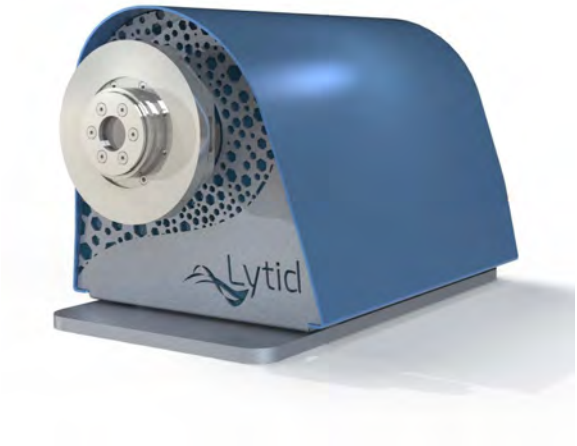
Detectors

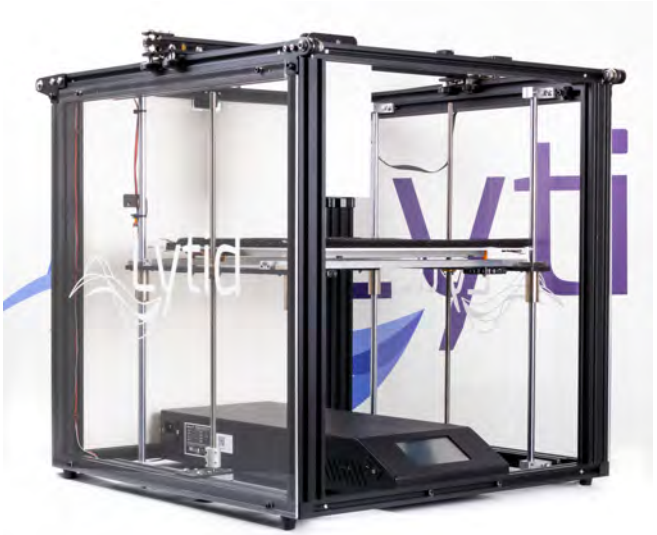
- superconductor bolometer
- THz and mid-IR
- **Scontel**

High Performance IRFPA Cameras

HD and large format IRFPA - SWIR, MWIR, LWIR

- High resolution HD
- 25 mK NETD
- Long life cryo coolers
- Low f/no optics
- Camera Link
- Onboard video processing
- IDCA - Integrated Detector Dewar Coolers Assemblies
- **AIRS, Lytid**





THz to SWIR Sources, Sensors and Optics

- Multi-band sources 2-5 THz
- Imaging 2-5 THz
- Pyro Sensor 0.1 to 30 THz
- sub-THz sources up to 600 GHz+
- 3D THz Scanner - TeraScan
- High-power, high-bandwidth sub-THz multipliers
- SWIR scientific camera
- Ultra-fast IR detector 26GHz
- THz optics
- **Lytid**

Our Partners:

We work with the leaders in electro-optical components and systems. They all share a commitment to excellence in product performance, reliability, availability and application knowledge. We proudly partner with them to provide you with the best solutions available to meet your production, development or research needs.

Our Expertise:

Boston Electronics' experienced applications specialists are all degreed scientists or engineers. We understand a wide range of technologies and applications:

- Photon detection and imaging
- Photon sources and lasers
- Signal and image process electronics
- Applications include: UV disinfecting & dose control, IR gas sensing, time-correlated single photon counting (TCSPC), temperature measuring, instrumentation & IR and THz imaging.

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01-23

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