

## Hermetic Sealing

Lower Leak Rates  
E-10 atm-cm<sup>3</sup>/sec air

Ultra Clean Processing  
Class 1 Cleanroom

Lower Costs



**MicroCircuit  
Laboratories**

[microcircuitlabs.com](http://microcircuitlabs.com)

**ADHESIVE  
KEEPS OUT UV LIGHT  
& LETS THE LIGHT IN**

**TWO PART EPOXY EP30-2LB  
Blocks UV Light Transmission**



**BLOCKS UV LIGHT**  
200-400 nm



**TRANSMITS VISIBLE LIGHT**  
450-900 nm and above



**OPTICALLY CLEAR**  
Refractive Index: 1.55



**MASTERBOND®**  
ADHESIVES | SEALANTS | COATINGS

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## ● new products



### 2.1-MP Sensor

The STARVIS IMX327 sensor from Sony Semiconductors and announced by **Framos GmbH** is a 2.1-MP sensor with a 1/2.8-in. optical format. With a 1920 × 1080-pixel array utilizing a 2.9-μm pixel size, the IMX327 reaches a frame rate of 60 fps at 12 bits. With its high sensitivity and low-light performance, the sensor is designed for security and surveillance applications as well as factory automation and industrial solutions. STARVIS technology brings a back-illuminated pixel to the CMOS sensor providing a sensitivity of 2376 mV, which is combined with an SNR1s of 0.18 lux, making this sensor perfect for tracking and monitoring under low-light conditions. The sensor delivers high image quality in the VIS and NIR light spectrums. High sensitivity, low dark current noise and no smear provide excellent image reproduction and, when combined with improved RGB color mosaic filters, excellent color reproduction with little to no additional processing.

[info@framos.ca](mailto:info@framos.ca)



### Compact Smart Spectrometers

The SP series of compact smart spectrometers with integrated CCD linear array detectors from **Spectrolight Inc.** provide a turnkey solution for measurement of light source behavior, analytical samples and tunable filters from the UV to the NIR range. The spectrometers feature scientific-grade resolution, sensitivity and speed in a miniaturized package. All models provide both adjustable slit and fiber-coupled input options and 2048 element detectors, delivering optical resolution from 0.3 to 7 nm at sampling speeds up to 1 kHz. The entry level SP245 is the smallest and most economical of the series, featuring a Sony CCD with enhanced UV coating. The SP642 utilizes a back-thinned Hamamatsu CCD with low dark noise. The flagship SP303 is based on a TE-cooled Hamamatsu CCD with

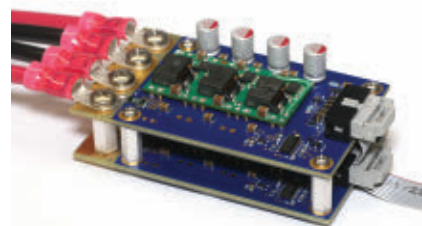
extremely low dark noise. Its large full-well depth delivers the highest signal-to-noise ratio in the SP series. Applications for the spectrometers range from laboratory research, such as photochemistry and analytical spectroscopy, to pharmaceutical applications, food and beverage testing, process monitoring and characterization of LEDs, and other light sources.

[info@spectrolightinc.com](mailto:info@spectrolightinc.com)

### Tunable Lasers

The TiSon GSB Titan Sapphire laser line from **Power Technology Inc.** comprises high-energy, broadly tunable lasers for the biosciences industries including photoacoustic imaging. The lasers are available in 200- and 400-mW average power configurations and offer user-tunable wavelengths from 700 to 900 nm with direct or fiber-coupled outputs. Both configurations provide high pulse energy, short pulse duration, high pulse-to-pulse stability, excellent pointing stability, maintenance-free operation, cost-effectiveness, fully automated wavelength tuning and fast wavelength switching. They are air-cooled and provide an ultracompact footprint without the need for a freestanding pump laser.

[sales@powertechnology.com](mailto:sales@powertechnology.com)



### Laser Diode Driver

The Model 787 Stackable CW and Pulsed Laser Diode Driver from **Analog Modules Inc.** is an efficient, current-regulated, low-ripple tri-phase laser diode driver designed to power pulsed and continuous wave high-current laser diode stacks. Proprietary technology provides a 50-A, 5.0-V driver with high efficiency of 96 percent in a compact footprint. Multiple drivers can be stacked together to achieve output currents of 200 A or higher. The driver includes open circuit, short circuit, over-temperature and under-voltage lockout protection.

[ami@analogmodules.com](mailto:ami@analogmodules.com)

### Positioning Stages

The V-551 family of ultraprecision positioning stages from **Physik Instrumente LP** are available with 0.2-nm resolution linear encoders, ideal for high-end alignment, scanning and automation applications. The models are equipped with precision crossed roller bearings featuring anticreep cage assist and guiding accuracy of 1-μm straightness and flatness per 100 mm. Two types of position feedback systems are available: absolute-measuring encoders providing 2-nm resolution