

## Product showcase

### Charge converter

Series 495B10 differential remote charge converters from the Vibration Division of **PCB Piezotronics** are used with differential charge output piezoelectric accelerometers. Differential sensors and signal conditioning electronics are used in flight-test applications due to their common mode noise rejection, which reduces noise in the measurement signal. These units not only convert a transducer's differential high-impedance charge input signal to a low-impedance voltage output and supplies the normal acceleration output, but also supplies a separate integrated output for velocity. The charge converters operate from 10 to 32 V dc over a range of -13 to +185°F and are packaged in a lightweight aluminum housing.



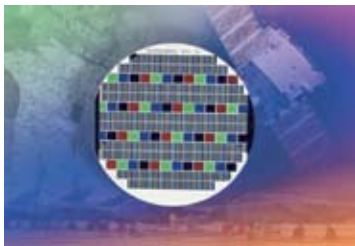
### UV light development kit

**JKL Components'** GB-UV1 designer's kit aids engineers working with experimental UV applications. It features an assortment of 69 UV lamps ranging from high-intensity UVC to UVA blacklight. It also contains 19 inverters, cabling, and other accessories. The kit enables designers to shorten design times, lower development costs, and reduce risk of redesign. Various wavelengths for emission, voltage inputs for power requirements, and sizes make this kit valuable for prototype and developmental efforts.



### Multiple coatings simplified

Patterned dichroic filters from **Deposition Sciences** are created using the latest photolithography equipment and advanced coating techniques. The technology allows the application of multiple coatings on a single substrate with dimensions as small as 100  $\mu\text{m}$ , with accuracy of  $\pm 1 \mu\text{m}$  and feature placement accuracy of  $\pm 5 \mu\text{m}$ . The filters operate over a range of wavelengths and claim to offer enhanced performance from near UV to IR. They can be applied to a variety of substrates in many shapes and sizes, as well as wafer substrates up to 100 mm diameter in materials such as silicon, glass, sapphire, and fused silica. The coatings are suited for use in CCD (charge-coupled device) imaging applications where a single optic is required to perform multiple functions.



### Intelligent connectors

**Trompeter's** 70/370, 80/380, and 150/3150 series twinax/triax connectors for MIL-STD-1553B data bus applications support the emerging 40 MB/s data rate for military avionics applications. Each of the six connector series is performance-rated to 500 MHz and delivers error-free digital signal transmission. The connectors support computerized/multiplexed digital data distribution systems servicing command, control, communications, computers, and intelligence functions. They protect data signals from extraneous noise through non-signal-carrying shielding.



### Electronic flight bag

**DAC International's** GEN-X system provides AC 120-76A, Class 2 flexibility, and Class 3 reliability. It is designed, built, and certified as professional grade avionics. The intuitive flexible software shell, called GENESYS, makes operation and training simple and keeps training costs low. It supports digital chart data from **Maptech, Jeppesen, or Lido**. A document reader provides a means to view, link, and search all manuals. Other applications such as weather, performance, checklist, cameras, and electronic logbook may also be controlled through the GENESYS shell. It provides airlines and operators the server side software for a simple turn-key, centralized control, and automatic update of all charts and manuals.



### Airborne digital sensor

The SH51 sensor head for the ADS40 from **Leica Geosystems** provides accurately co-registered color, IR, and panchromatic images. The SH52 adds a second beam-splitter for co-registered stereo viewing of all image bands. These two features allow users to employ the five-band co-registered imagery for all aerial surveying and airborne remote sensing applications. The ADS40 saves time and money by offering simultaneous, wide-area acquisition of true high-resolution panchromatic, color, and color-IR digital images. The single-lens design of the ADS40 eliminates the need for multiple-lens image patching and pan-colorizing (pan-sharpening) with low-resolution spectral band images that cause color distortion. The system achieves optimal color fringe-free stereo viewing with a constant stereo viewing angle, which provides an uncompromised geometric and radiometric representation of the earth's surface.



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