

# Product showcase

## Advanced coatings application

DUX spray guns for industrial coating equipment are used by firms including **Lockheed Martin** and **Evergreen Air Center**. The spray painters feature advanced airflow technology to offer transfer efficiency improvements, resulting in coating cost savings of 15-40%. They reduce overspray for a healthier work environment. The units include an operator-friendly design and flexibility for multiple applications. Three products consist of a pressure feed device for large-volume coating applications, gravity feed for smaller quantities or more frequent material changes, and automatic for use with robotic applicators or reciprocators.



## Cable tension meter

The ACX series of precision aircraft cable digital tension meters from **Tensitron** features a large graphic display with adjustable backlighting and contrast; tension value selection from lb, kg, or N; and display views of tension, battery charge level, and cable size selected. The user can push a button to activate the memory function to store and display up to five separate tension readings plus the average value of these stored readings. Accuracy is  $\pm 2\%$  full scale for menu-selectable calibrations.



## EMI filters

**Picor's** QPI-12 electromagnetic interference (EMI) filter and QPI-10 EMI filter with hot swap are optimized for VI chip applications. The QPI-12 filter attenuates conducted common-mode and differential-mode noise to comply with CISPR22 requirements. The filter operates from 10-76 V dc and supports 7 A loads up to 80°C. It is parallelable for higher power and occupies only 0.5 in<sup>2</sup> of board area. The QPI-10 complies with Advanced TCA PICMG3.0 requirements for hot insertion and board-level conducted noise limitations defined by EN 55022 class B. The EMI filter provides conducted common-mode and differential-mode noise attenuation from 150 kHz to 30 MHz. It is designed for use on a 48- or 60-V dc bus. The in-rush current limit and circuit breaker satisfy the 200-W-per-board PICMG3.0 limit up to 70°C PCB temperature around the device.



## Machine vision

The VisionPro machine vision system from **Cognex** accelerates the development of PC-based machine vision solutions for challenging automated inspection and quality assurance applications. Interactive tools allow users to evaluate, implement, and deploy multi-camera applications completely without programming. The QuickBuild environment quickly defines image acquisition, vision tools, and accept/reject criteria. The Communications Explorer sends inspection results to I/O lines and communication devices such as programmable logic controllers or reject mechanisms. Optional Scripting extends the software without programming the entire application.



## ac current controller

The 882 Series ac current controller from **American Aerospace Controls** integrates an output relay switch with an LED, indicating on/off status and enabling detection of ac current overload or underload, helping to prevent system damage. The 2 A relay is also capable of triggering an alarm, shutting down an electrical system, and providing automatic warning alerts. Available with an optional time delay, the controller also provides  $\pm 5\%$  accuracy over a frequency range of 50 to 400 Hz. In addition, the controller features a field adjustable current trip point and high stability over a temperature range of -20°C to 70°C.



## UAV feed analysis

**Sarnoff's Pyramid Vision** subsidiary has developed TerraSight, a system that processes and analyzes UAV feeds in near real time and combines video data with existing maps, imagery, and other data to create panoramic situational awareness. Comparable systems may take more than 20 min to do what this system does in seconds, according to Sarnoff. Features include up to eight UAV data feeds to be spliced into a single view, real-time geographic information, sharing and analysis capability of data across military branches, enhanced video stabilization and real-time tracking of moving targets, availability in one turnkey package, and a "Tivo-like" digital video recording system for cataloging and storing video intelligence.

