



# RUGGED RECORDER, COMPUTERS, AND DISPLAYS





# RUGGED. MISSION-READY. BATTLE-TESTED.

Spectra Defense Technologies is a trusted group of leading designers & manufacturers of rugged, highly-engineered avionics, electronics products, and systems that support military operations in all modern battlespace domains. Whether in the air, on land, at sea, or in space, we have the decades of proven performance and program success needed to effectively support national security and the mission.

End-to-end information products & systems, when it matters most, **Spectra is the solution**.







Spectra exists to support mission critical challenges by creating enduring technological solutions that address the spectrum of legacy specifications, current demands, and future capabilities.







# **TOGETHER, WE SIMPLIFY INTEGRATION**

The Spectra family of companies boasts a half-century of extensive C5ISR experience. Our proven and trusted systems Capture, Process, and Display your mission-critical data in the harshest environmental conditions. In the air, at sea, on land, and in space.

#### **CAPTURE PROCESS DISPLAY** RECORDING **ACQUISITION** NAS & **ENCRYPTED DISPLAYS & TABLETS & FILE SERVING STORAGE PERIPHERALS** WORKSTATIONS RECORDER ACQ UNIT 5' - 43" I CD RW515 XSR XSR CALCULEX CALCULEX FAMILY NAS DISPLAY STATION GALLEON GALLEON ARGON ARGON TITAN RECORDER XMC G1 MICRO KVM AT213 GALLEON GALLEON FAMILY SFRVFR SWITCH TABLET GALLEON **GALLEON** ARGON ARGON XSR RECORDER **KEYBOARDS** GALLEON ARGON PROCESSING & MISSION HPR COMPUTING ROUTING RECORDER GALLEON XSR MISSION RIPR RIPR 2600 6601 COMPUTER RECORDER CALCULEX GALLEON CALCULEX RIPR GROUND 2600R VEHICI F CALCULEX COMPUTER GALLEON HPR PROCESSOR ACB RUGGED GALLEON COMPUTER ARGON







Integrated, open system data acquisition, recording, processing and routing solutions for today's demanding national security needs.

Calculex designs, produces and supports mission-critical defense electronics and software systems for numerous aircraft fleets, missile and UAV systems, and the flight test community. Our trusted systems are fielded on dozens of fixed- and rotary-wing military platforms. Calculex was founded in Las Cruces, New Mexico, in 1986 and – for over 30 years – has set the industry standard for airborne mission data and video recording, processing, and routing solutions.

#### **DATA RECORDERS**



The Calculex RIPRs are designed for use on any mobile platform for applications that require a small form factor data acquisition, processing, routing, recording and/or streaming capability. With the variety of factory or user stackable/reconfigurable or fixed models, the Calculex Model 1201/1401, 1402, 1403 RIPRs are the smart choice for any commercial or military data acquisition application.

#### VIDEO RECORDERS



The CSR-2300 Recorder, functioning as an Integrated Processor and Router (RIPR), offers multifaceted capabilities including Digital Video Recording with in-flight playback, Flight Data Recording with multi-level security, data bus routing, and integration with pods and Hands On Throttle-And-Stick (HOTAS) systems. From 2007 to 2020, a total of 535 systems were delivered, with ongoing support for sustainment, spares, and training.

#### DATA ACQUISITION



Calculex's Data Acquisition capabilities redefine high-speed, high-capacity data capture for modern military needs with the RAPTOR, a cutting-edge fiber optic recorder. It exceeds expectations in data acquisition, processing, and recording, offering unparalleled storage expandability and precision data synchronization across diverse sources, adhering to the IRIG 106 standard and TMATS configurations for versatile platform adaptability.

#### HIGH-DENSITY STORAGE



The Calculex Model 1401 RIPR offers unparalleled high-density storage for diverse applications, featuring a 1TB industrial CFAST card for quick, toolless access. This versatile recorder supports a wide range of digital and analog inputs, with the ability to expand capabilities through stackable/reconfigurable I/O modules. Designed for rapid configuration and deployment, it meets the stringent demands of both commercial and military data acquisition applications.



An innovative and agile provider of rugged and secure C5ISR-Enabling technologies focusing on high-density secure storage, file serving, and mission processing.

Founded in 2009, Galleon quickly earned a reputation as an innovative and agile provider of Commercial off-the-shelf (COTS) rugged computing products for the defense and aerospace market. Meticulously designed and engineered to support national security requirements around the world, Galleon's secure and reliable C5ISR-enabling technologies promote a tactical advantage and foster peace of mind in the harshest environmental conditions.

#### **DATA RECORDERS**



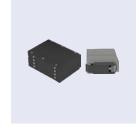
Galleon's Rugged Data Recorder excels in compactness and performance, capable of interfacing with multiple Gigabit Ethernet sources for efficient data capture. Its SWaP-C optimized design suits various deployed environments like unmanned systems and ground vehicles. Features include removable storage for quick data access, industry-standard SSDs for evolving storage needs, and optional FIPS 140-2 and AES-256 encryption for enhanced data security, complemented by flexible key management and additional security measures.

#### NAS/FILES SERVERS



Galleon's rugged Servers and NAS are engineered for the most demanding applications, ensuring performance and functionality in severe conditions. Ideal for a range of systems from small unmanned to large manned vehicles, these solutions offer seamless integration and enhanced data security, supporting server virtualization and efficient network storage without compromising on system performance or security.

#### **ENCRYPTED STORAGE**



Galleon's Removable Data Modules provide flexible, encrypted storage for data recorders, NAS, and servers, designed for easy field swapping. They accommodate up to 80TB with customizable SSD options. Security is bolstered by AES 256-bit encryption, quick and secure erase functions, and NIAP-Approved Dual-Layer Full Disk Encryption, safeguarding data across various environments.

#### MISSION PROCESSING



Galleon's rugged Mission Computer excels in extreme environments, ensuring high functionality and performance for applications in UAVs, UGVs, surveillance, and sensor development. Its SWaP-optimized design is complemented by optional advanced security features, including FIPS 140-2 and AES-256 encryption, to safeguard data with flexible key management and erasure options.





Argon designs, produces, and supports rugged computing and display solutions that serve sea, air, and land applications worldwide.

Argon has been providing rugged computer and display solutions to mission critical defense applications for over 35 years. Argon focuses on the demanding requirements of our customer base and offers a wide variety of solutions that minimize size, weight, and power while maintaining state-of-the-art visualization and computing performance.

#### **DISPLAY SYSTEM**



Argon specializes in rugged LCDs ranging from 5.0" to 43", designed for deployment across a wide variety of military platforms. Products feature sunlight readability, NVG compatibility, rugged AR touch screens, and more. Argon can customize units to meet specific program requirements.

#### **COMPUTING SOLUTIONS**



Argon's low (SWaP) computing solutions enable swift conflict resolution and reliable performance. By sourcing both the display monitor and computing system from Argon, you mitigate potential conflicts between the two, ensuring compatibility.

#### TABLETS & WORKSTATIONS



Argon excels in rugged tablets and workstations, offering the smallest Size, Weight, and Power (SWaP) for demanding environments. Our tablets and fully featured workstations are designed for extreme durability, with customizable options like processor types, RAM sizes, and storage. Integrated solutions ensure compatibility and ease procurement complexities, eliminating potential conflicts.

#### **KVM'S & PERIPHERALS**



Argon offers NIAP EAL4-certified KVM switches along with a full range of keyboards suitable for a wide variety of military and aerospace applications. Features include NVIS compatibility, sealed and backlit options, and an integrated trackball. In addition, Argon offers customization options including I/O interfaces, pointing devices, and mounting solutions.



# A TRUSTED AND GROWING PLATFORM OF C5ISR COMPANIES

Bringing over a half-century of rugged, mission-ready, battle-tested experience to bear in aerospace and defense applications.



### **CONTACT US**

Let us know how Spectra's full suite of rugged information products & systems can help meet your needs. We look forward to answering your questions and discussing your program requirements with you.

## **CALCULEX**

Las Cruces, New Mexico

#### **US Sales**

+1 575-525-0131 sales@calculex.com

calculex.com

# **GALLEON**

Oslo, Norway London, UK Munich, Germany Houston, Texas Fort Worth, Texas San Diego, California

#### **US Sales**

+1 281-769-8211 sales\_us@gec-us.com

#### International Sales

+47 2108 0290 sales@galleonec.com

galleonec.com

# **ARGON**

Alpharetta, Georgia

#### **US Sales**

+1470-239-7400 sales@Argon.com

#### International Sales

+39 335 831 8060 sales@Argon.com

argon.com







# GALLEON ARGON CALCULEX



SPECTRA
Defense Technologies

LEARN MORE AT

sales@spectra-aerodef.com spectradefense.tech