

ACROAMATICS
TELEMETRY SYSTEMS

End-to-End Telemetry Ground Station Solutions

WORLD-CLASS AEROSPACE TELEMETRY PRODUCTS, SYSTEMS, & SOFTWARE.



WWW.GDPSPACE.COM | GDPIINFO@GDPSPACE.COM | (215) 657-5270

 Designed and Built in the USA, Used and Supported Worldwide

Receivers / Demodulators / Bit Synchronizers

- ARTM 0/1/2 ...STC, LDPC, Multi-H CPM, Viterbi, Reed Solomon
- Advanced Combiner Function (AGC & Data Quality)
- Integrated RF / IF / Subcarrier / Demod / Bit Sync
- Exclusive 4 Input Diversity Combiner / Array Processor
- PM, PM/PSK, DPM, FM/FM, PCM / FM
- B / Q / AQ / UQ / SOQPSK; GMSK
- Best Source Selector Output
- Superior Adaptive Equalizer
- Ethernet / Data Output
- 70MHz Test Modulator
- Remote Control GUI
- IRIG CH7 Decoding
- IRIG CH10 Output
- 10bps to 40Mbps
- IRIG 218-10/20



IRIG218-20 & IRIG106 CH7 Support

Bit Synchronizers

- 10bps to 40+Mbps
- Viterbi Decoder
- PCI & Modular Cards
- Single / Multi-channel
- Built-in BERT / Frame Sync
- QPSK, OQPSK, SOQPSK Merging
- Single & Multi-channel Rackmount
- DQE Best Source Selector Output
- PCI Card Solutions (Single / Dual)



Best Source Selectors (Correlating & Non-Correlating)

- Diversity Combining - True Diversity Systems Gain (Spatial Diversity)
- Excellent Fade & Multipath Mitigation
- Direct Ethernet TMOIP I/O
- Processes Encapsulated Data DQE / DQM (GDP / RCC)
- Works w/ Encrypted Data
- Analog or Digital I/O
- Over 5dB Performance Gain
- Remote Control GUI
- IRIG 218-10/20



For nearly 50 years, we have been providing reliable, innovative solutions to the telemetry and flight test communities. Our industry leading products, systems, and software offer unparalleled performance and functionality, which has been proven over and over again in real-life testing by our customers.



TMOIP Telemetry Gateways

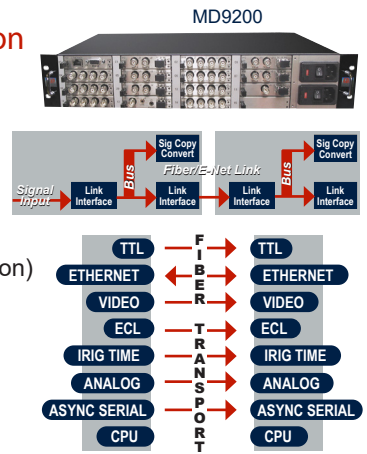
- 1U: 2, 4, & 12 Channel Configurations
- PCM Over IP
- Settable Latency
- IRIG 106 CH10 Output
- PCM / IRIG TMOIP
- Bit Sync Input Capable
- IRIG Time Tag / Transport
- Frame / Byte Aligned Data
- UDP/IP, TCP/IP, Multicast
- Web-based User Interface
- IRIG 218-10/20



IRIG218-20 & IRIG106 CH7 Support

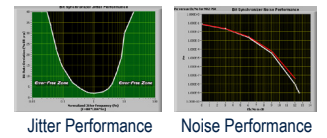
Data Distribution & Conversion

- 16 Hot-swap Module Slots
- Signal Distribution - Global & Daisy Chain Buses
- Signal Multiplication
- Fiber Transport
- Special Functions (Code Conversion)
- Signal Conversion - TTL, RS-422, RS-232, Fiber, ECL, LVDS, Analog, Time, Video...
- Remote Control Monitoring
- Redundant Power Supplies



Data Transmission Test Sets (BERTs)

- User Programmable Patterns: PRN Patterns 5 thru 31
- Jitter / Noise Performance Test / Plots
- Independent Transmit / Receive
- Link Delay Measurement
- Dual-channel Available
- IRIG Code Conversion
- Acquisition Time Test
- 1bps to 50Mbps
- LDPC



Ethernet Recorder

- Greater than 1GB/s Sustained Payload Recording Rate
- Separable Management & Data Network Interfaces
- Standard Dual 10 & Dual 1GB Ethernet Interfaces
- Built for High Reliability & 24/7 Operation
- Storage Capacities to 32TB
- Additional I/O & AES
- Encryption Options



DATA PROCESSING

DISPLAY & ANALYSIS

Telemetry Data Processor / Server TDP / S™

- Low Latency / Multi-stream -

- Raw & Processed Data Networking
- 1 to 16 PCM Streams - Network Centric, Scalable, Low Latency
- Integrated Multi-band PCI Receiver
- 50+ Mbps Bit Sync, Decom & Simulator
- 'REAL' Real-time Decom & EU Processing
- Card Embedded, Software Defined Processing
- Win 10 STIG & SHB Cybersecurity Compliant
- Integrated EU / Math Processor & Data Distribution
- IRIG 218-10/20, CH10/11, CH4 Class I & II Decom, 8 MS/s EU, CCDS



Turn-key Card Level & Engineered Solutions

- Scalable from Notepad to Enterprise TM Server
- Integrated Raw & Processed Data Recording
- Supports Multi-stream Receiver, Bit Sync, Decom & Sim Configurations
- On-the-Fly Dynamic Format Switching
- Easily Implemented Integrator API
- End-to-End Telemetry Acquisition & Ground Station Solution
- Real-time Decom of Multiple Embedded Async Frames & Packetized Data



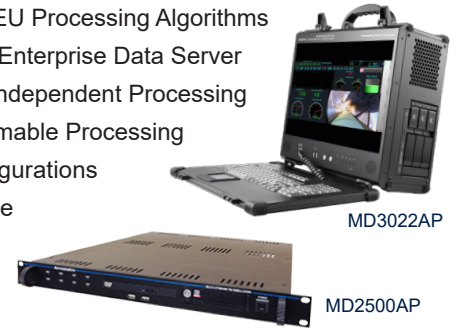
Integrated Mission TM Simulation & Validation

- Low Latency User-Configurable Range PCM Mission Simulation
- Stream Rates to 50+Mbps, Supporting Complex Test Events
- Integrated Modulation & RF Signal Generation
- Text File, IRIG106 CH10 Recording, & Acroamatics TDP Vehicle Format User Editing Modes



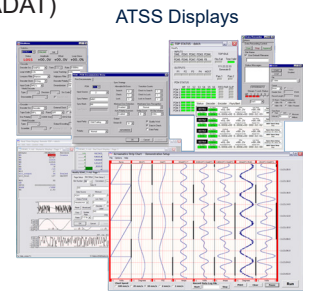
High-Performance Portable Decom Units

- 400+ 'canned' Card-level EU Processing Algorithms
- Scalable from Notepad to Enterprise Data Server
- Windows OS Application Independent Processing
- Card Embedded Programmable Processing
- 1U, 2U, & Lunchbox Configurations
- Expandable & Upgradeable
- Decom / EU & Output Data Product Formatting in Microseconds



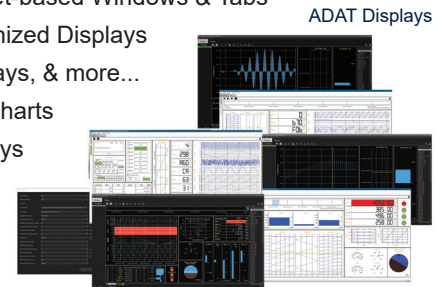
Wizard Enabled Telemetry Software

- End-to-End Telemetry Acquisition & Ground Station Solution
- Acroamatics' Telemetry Software Suite (ATSS)
- Acroamatics' Display & Analysis Tool (ADAT)
- Real-time Decom & EU Optimization
- Easily Implemented Integrator API
- Wizard-based GUI Setup & Data Management
- Raw & Processed Data Recording, Reformat, & Export Tools
- TMATS Support



Acroamatics Display & Analysis Tool (ADAT) Software

- Customizable System Dashboard w/ Real-time Quick-look Displays
- Resizable & Movable Widget-based Windows & Tabs
- Time Correlated & Synchronized Displays
- Artificial Horizon, Dial Displays, & more...
- Horizontal & Vertical Strip Charts
- Bar Charts & Tabular Displays
- Post Test Analysis Displays
- Pause, Scroll, & Zoom



Telemetry Range Management Software (TRMS)

Complete control of all telemetry range assets (Receivers, TMOIP Transport Devices, Best Source Selectors, Ethernet Recorders, Telemetry Data Processors) in an intuitive user-friendly interface.

- Software Defined Networking
- Resource Virtualization
- Full Link Connection / Status Monitoring & Display
- End-to-End Ethernet Address Management
- Built-in BERTS & Point-to-Point Link Test Functions
- Java-based OS Independent Software Application
- Scalable (Single Units to Complete Range Solution)
- Mission-based Application Support

