



**ACROAMATICS**  
**TELEMETRY SYSTEMS**

# End-to-End Telemetry Ground Station Solutions

WORLD-CLASS AEROSPACE TELEMETRY PRODUCTS,  
SYSTEMS, & SOFTWARE



# DATA ACQUISITION

# DATA TRANSPORT

## 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
- IRIG CH7 Decoding, CH10 Output, 218-10/20 Transport
- 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
- 10bps to 40Mbps



## 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

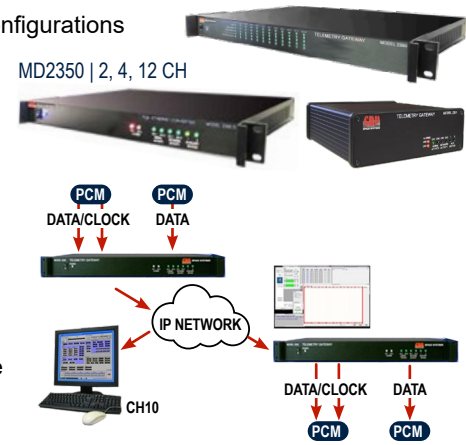
- Diversity Combining - True Diversity Gain (Spatial Diversity)
- Excellent Fade & Multipath Mitigation
- Direct Ethernet TMoIP I/O
- Processes Encapsulated Data DQE / DQM (GDP / RCC)
- Works with Encrypted Data
- Analog or Digital I/O
- Over 5dB Performance Gain
- Remote Control GUI
- IRIG 218-10/20



For 50 years, GDP & Acroamatics have provided reliable, innovative solutions to the telemetry and flight test communities. Since joining forces in 2013, the GDP/Acroamatics product offerings now address the complete product chain from Data Acquisition through Data Conversion and Distribution to Telemetry Processing and Display.

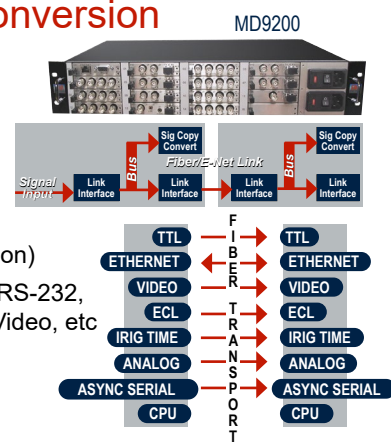
## TMoIP Telemetry Gateways

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



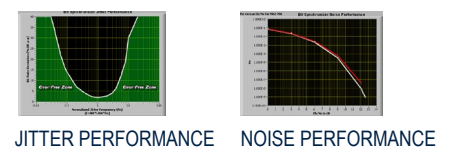
## Data Distribution & Conversion

- 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, etc
- Remote Control Monitoring
- Redundant Power Supplies



## Data Transmission Test Sets (BERTs)

- User Programmable Patterns: PRN Patterns 5 Through 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

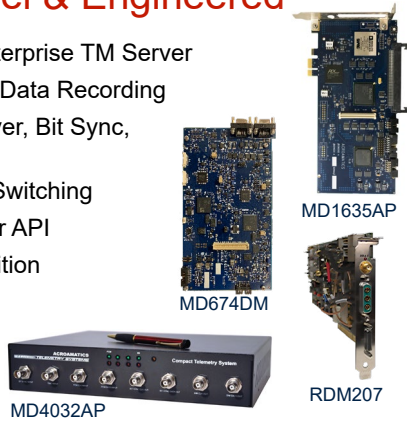
## Telemetry Data Processor/Server TDP/S™ Low Latency / Multi-stream

- 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



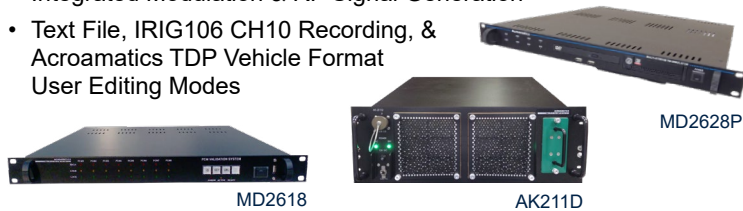
## Turn-Key Card Level & Engineered

- 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



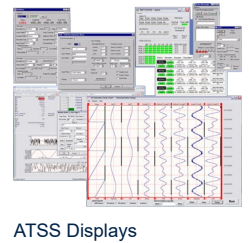
## High-Performance Portable Decom Units

- 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

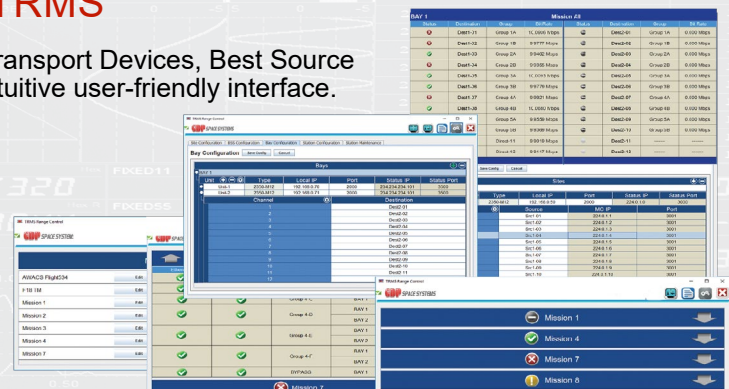
- Customizable System Dashboard
- Real-Time, Quick-Look Displays
- Resizable & Movable Widget-based Windows & Tabs
- Time Correlated & Synchronized Displays
- Artificial Horizon, Dial Displays, & More
- Horizontal & Vertical Strip Charts
- Bar Charts & Tabular Displays
- Post Test Analysis Displays
-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



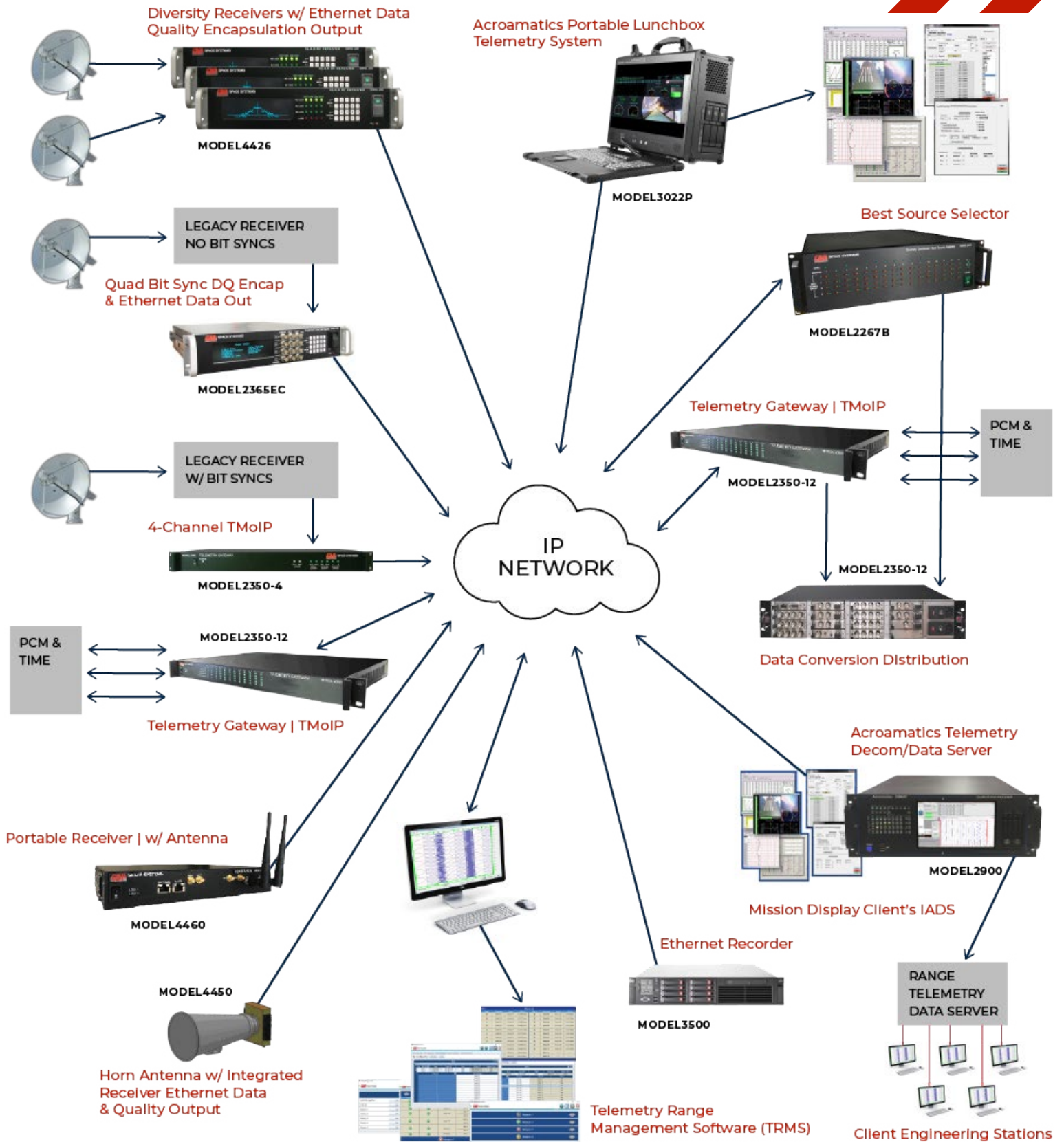
## Telemetry Range Management Software | TRMS

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



# NETWORK CENTRIC SOLUTIONS



## GDP Space Systems

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## Acroamatics Telemetry Systems

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