End-to-End Telemetry
Ground Station Solutions

STATE-OF-THE-ART AEROSPACE TELEMETRY PRODUCTS, SYSTEMS, & SOFTWARE.

WWW.GDPSpace.com  |  GDPINFO@GDPSpace.com  |  (215) 657-5270
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
- PM, PM/PSK, DPM, FM/FM, PCM / FM
- B / Q / AQ / UQ / SOQPSK; GMSK
- Best Source Selector Output
- Superior Adaptive Equalizer
- Ethernet / Data Output
- Remote Control GUI
- IRIG CH7 Decoding
- IRIG CH10 Output
- 10Bps to 40Mbps

Bit Synchronizers
- 10Bps to 40Mbps +
- 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
- Diversity Combining / Correlating
- Ethernet I/O
- Works w/ Encrypted Data
- Superior Fade Mitigation
- Excellent Multipath Mitigation
- Analog or Digital Input
- True Diversity Gain (Spatial Diversity)
- Processes Encapsulated Data
- DQE / DQM (GDP / RCC)
- Over 5dB Performance Gain
- Remote Control GUI

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

TMoIP Telemetry Gateways
- IP over PCM
- Settable Latency
- IRIG 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
- Available in 1U:  2, 4, 6 & 12 Channel Configurations

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
- 1 Bps to 50 Mbps
- LDPC

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

For nearly 50 years, we have been providing reliable, innovative, state-of-the-art solutions to the telemetry and flight test communities.

Our industry leading products, systems, and software offer unparalleled performance and superior functionality, which has been proven over and over again in real-life testing by our customers.
DATA PROCESSING

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 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
• On-the-Fly Dynamic Format Switching
• Supports Multi-stream Receiver, Bit Sync, Decom & Sim Configurations
• Easily Implemented Integrator API
• Real-Time Decom of Multiple Embedded Async Frames & Packetized Data
• End-to-End Telemetry Acquisition & Ground Station Solution

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, IRIG CH10 Recording, & Acroamatics TDP Vehicle Format User Editing Modes

High-Performance Portable Decom Units
• Over 400 “canned” Card Level EU Processing Algorithms
• Decom / EU & Output Data Product Formatting in Microseconds
• Scalable from Notepad to Enterprise Data Server
• Windows OS Application Independent Processing
• Card Embedded Programmable Processing
• Expandable & Upgradeable

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

Display & Analysis
• Freeze & Zoom Scope & Strip Chart w/ Trigger
• Native TDP TM Data Reformat & Export Tools
• Includes Client Record / Playback / Export
• Local Data Analysis & Report Generation
• Integrated 3rd Party Client Display Options
• Real-time & Post Mission (playback)
• FFT Analysis

Telemetry Range Management Software (TRMS)
Complete end-to-end control of all telemetry range assets (Receivers, TMoIP Transport Devices, Best Source Selectors, Ethernet Recorders, Telemetry Processors, etc) in an intuitive user-friendly interface.
• Full End-to-End 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 (From Single Units to Complete Range Solution)
• Mission Based Application Support
NETWORK CENTRIC SOLUTIONS

Diversity Receivers w/ E-net Data Quality Encapsulation Output

Acroamatics Portable Lunchbox Telemetry System

Best Source Selector

Telemetry Gateway (TMoIP)

Data Conversion Distribution

Acroamatics Telemetry Decom/Data Server

Mission Display Client’s IADS

Range Telemetry Data Server

Ethernet Recorder

Client Engineering Stations

Telemetry Range Management Software (TRMS)

IP NETWORK

PCM & TIME

Quad Bit Sync DQ Encap & Ethernet Data Out

PCM & TIME

LEGACY RECEIVER NO BIT SYNCs

LEGACY RECEIVER NO BIT SYNCs

4-Channel TMoIP

Telemetry Gateway (TMoIP)

Portable Receiver (w/ Antenna)

Horn Antenna w/ Integrated Receiver Ethernet Data & Quality Output

MD4425

MD3022P

MD2237B

MD2365EC

MD2350-12

MD2350-4

MD9200

MD2900

MD3500

MD4400

MD4450