



DAC Multiplexer Model 2425P

Features:

- Fiber Linked, Low Latency Telemetry DAC Stripchart Output
- Precise Channel-to-Channel Coherence and Accuracy
- Sixty-Four (64), independently scaled and EU converted, deterministically driven 13-bit resolution data outputs per unit
- Supports placement to 4,000 ft distance from host TDP with no deterioration in output data quality
- Multi-unit networked operations to 2,048 Coherent Stripchart Outputs
- Supports shared use by up to eight (8) Acroamatics TM Decom systems, supporting even the largest range data center operation
- Supports the full range of Acroamatics multi-stream real-time range telemetry data EU conversion and processing data output formats!

Optional

Expansion card includes 2 additional input ports and allows linking up to 32 units (2048 channels) per station.

Related Products

MD2900AP Range TM Data Server
MD3022AP Portable TM Station
MD2500AP Compact Rackmount Unit
MD482M local DAC Output Interface

Acroamatics entire line of TDP Unit, Card sets, and Software products

General Description

The 2425 DAC Multiplexer chassis enables up to eight (8) Acroamatics (Telemetry Data Processor) units to

send interrupt free multiplexed DAC and Discrete data messages over fiber to up to 64 precisely scaled, time coherent DAC output channels. With an optional expansion card the Model 2425P is capable of linking up to thirty-two DAC Multiplexer output units in any location within the units 4,000 ft fiber communications range.



Up to eight independent Acroamatics TDP range data server processing units can be cross-linked to share DAC MUX output resources, allowing each TDP unit access to any or all other DAC output channels. This enables strip chart devices to be dynamically re-allocated in the event of failure or mission priority change. Chassis options support a variety of copper and fiber-optic link options. The Model 2425 DAC MUX supports regeneration of IRIG B time code, slow code, and output of remote stripchart PAPER RUN switch control outputs, providing these signals on eight separate RJ45 connectors (for control of up to 8 stripchart recorders per 2425P DAC MUX output).

Serial input messages to the Model 2425M DAC MUX units are generated by Acroamatics TDP system Decom and PDSP EU processing modules, under telemetry system operations program control. Performance specifications appear on the page following.

Please contact factory Acroamatics sales and application support personnel today to discuss your range telemetry data processing, display, and analysis needs today.

Functions

Inputs

The Model 2425 provides four serial inputs, and comes with either fiber optic for operation to 4,000 feet, or copper wire for operation to 100 feet. The expansion option adds two input channels and three transmit channels, which allows configurations up to 32 units deep and up to 4 units wide.

Calibrator

Allows all D to A outputs to be set to -5V, +5V or to a step calibration with 11 output levels

Analog Output (Output loaded with 10k Ohm and 50pf in parallel)

Resolution

13 bits of resolution, 2's complement binary input

Accuracy

Plus or minus 2 LSB

Linearity

Plus or minus 1 LSB

Stability

10ppm per degree C

Settling Time

2.5 microseconds to within plus or minus 1 LSB

Slew Rate

3 Volts per microsecond

Output Current

1 mA maximum @(+5V)

Output Voltage

-5V to +5V

Discrete Output

Outputs

64 discrete output lines, all TTL Compatible

Addressing Modes

The discrete outputs may be addressed as four 16-bit registers, eight 8-bit registers, or 64 1-bit registers. When selected as 16-bit registers, strobe and acknowledge signals can be used to synchronize message transfers

Output Current

32ma @ 2.4V, and 48ma @ 0.40V

Physical

Power

104-125 VAC (standard) 100/120/220/440 available; 47-63 Hz, 3A max, Redundant / Hot-swappable.

Dimensions

3.48" (8.84cm) H x 19.0" (48.26cm) W x 20.19" (51.28cm) D

Temperature

Operating: 0° to +40° C. Non-operating: -40° to +86° C

Relative Humidity

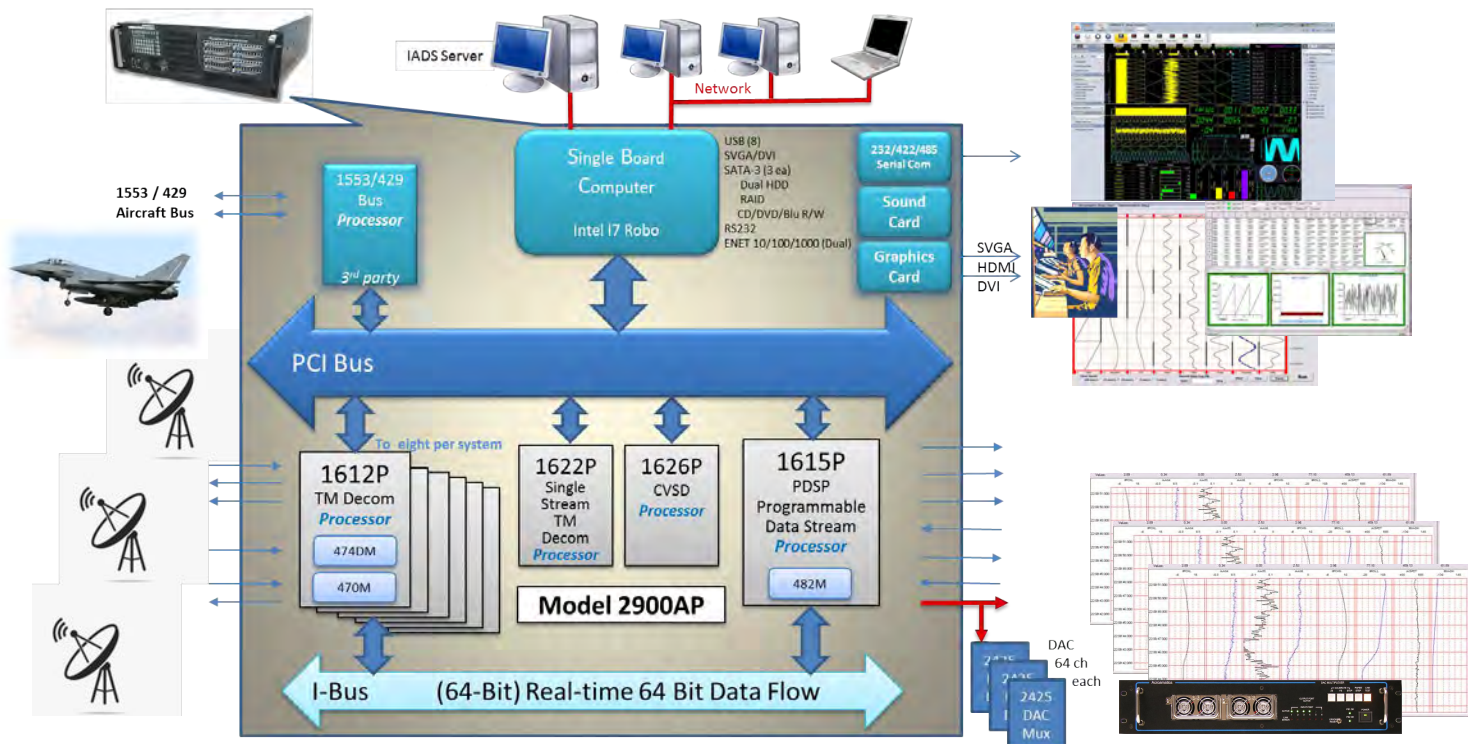
Up to 90% non-condensing

Shock

Operating 6G, Non-operating 50G

Vibration

Operating 0.5G, 5 to 2000 Hz, Non-operating 1.2G, 5 to 500 Hz



Specifications subject to change without notice.