

## Hypermod™ Universal Telemetry Transmitter Interface

The Hypermod Universal Telemetry Transmitter Interface simplifies the interface between telemetry transmitters and data sources by accepting either differential RS-422 or single-ended TTL level signals and providing clock and data output compatible with both legacy and digital transmitters.

### Simplify Telemetry Transmitter Interfacing

- ▼ Either single-ended TTL or differential RS-422 signals are accepted
- ▼ Either asynchronous or synchronous data accepted
- ▼ Provides both single-ended and differential clock and data outputs compatible with legacy or digital transmitters
- ▼ Can be stacked on Hypermod transmitters to save space

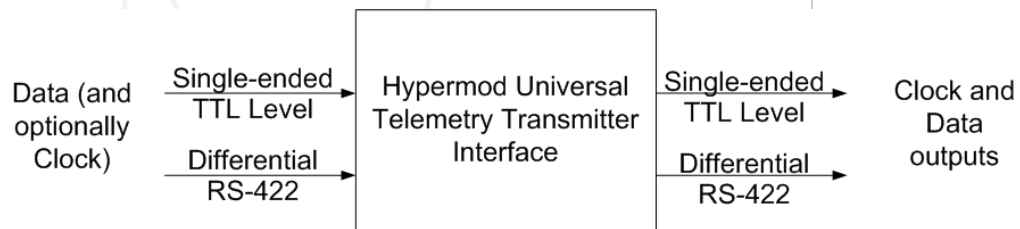


Nova Engineering's Hypermod Universal Telemetry Transmitter Interface provides a convenient means to interface single-ended data streams to differential input transmitters, and vice-versa. Either synchronous or asynchronous data can be supplied to the Universal Transmitter Interface.

When a clock signal is not available for an encrypted or randomized data stream, the Universal Telemetry Transmitter Interface locks on to the data rate present at the input and provides a recovered clock output suitable for use with digital transmitters.

The Universal Telemetry Transmitter

Interface provides a low-cost and simple means to connect telemetry transmitters to a variety of telemetry equipment, increasing the flexibility and value of an existing equipment stock.



### Applications

- ▼ Flight Test Telemetry Data Systems

**Data and Clock**

Clock operation	Synchronous; option for asynchronous
Functions	Enable/disable frame insertion Store/recall frame structures Payload length between frame insertion Frame counter maximum count; enable/disable Source ID; enable/disable
Data rate	Automatically scales with input rate Compatible with Hypermod MMT28 transmitters
Clock and Data Impedance	Single-ended TTL: 50 ohms Differential RS-422: 100 ohms
Data Source	Synchronous or Asynchronous Differential RS-422 or Single-ended TTL
Connector	MDM-15
Forward Error Correction	Turbo Product Coding, block sizes [32, 26]; [64, 57]; and [128, 120] (available option)

**Signal/Connector**

Input levels	RS-422 compatible
Band rate	Fixed rate 19.2 Kbps
Connectors	MDM-9 Control and Data: MDM-15

**Power**

Input voltage	MIL-STD-704 voltage range; (22-32 Vdc, typical)
Input current	TBD

**Mechanical**

Dimensions	2.5" x 3.5" x 0.4", exclusive of connectors 2.0" x 3.0" x 0.4", version also available
Weight	8 oz. maximum

More information available.  
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