

# D.T.MUX COD-R™



## Miniature Data Acquisition & Transmitting system

Reference#

DTMUX-COD-R



The D.T.MUX COD-R is a miniature data acquisition system (until 128 channels) with very low latency real time transmitting.

Especially design for high stress environment and destructive test, like impact test system or UAV, when integration space constraints are to maximum.

The unit is composed from 1 to 6 user selectable acquisition module following chassis dimension. Modules can be chosen following needs to acquire analog or digital data.

### Applications

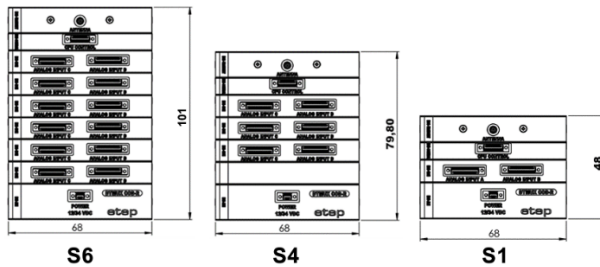
- Real time Transmission
- Very low latency data acquisition
- Harsh environment/ High velocity / Impact Test
- Low volume integration

This is an all in one solution, the base system includes a transmitter (Band S, 1 or 5 Watt(s)) and permit transmit data in real time to a ground station or another system (IRIG 106 Chapter 4 standard). In option an internal solid-state memory until 128GB and replaceable Internal one-shot battery power energy until 20 minutes can be available.



## MECHANICAL

	Specification	Remark
<b>Size (mm)</b>	101 x 68 x 76.5	6 Modules ( <b>S6</b> )
	79.8 x 68 x 76.5	4 Modules ( <b>S4</b> )
	48 x 68 x 76.5	1 Module ( <b>S1</b> )
<b>Weight</b>	≈ 650g	6 Modules
	≈ 540g	4 Modules
	≈ 380g	1 Module
<b>Connectors</b>	MIL-DTL-32139	Nano-D Serie
	SMA	Antenna
<b>Mounting</b>	12x M3	Customizable



## ELECTRICAL

<b>Input Voltage</b>	28Vdc (12 to 34Vdc)
<b>Power consumption</b>	≈ 12 to 25 watts (28Vdc)
<b>Power Interruption</b>	≈ 60 to 200ms
<b>Standard</b>	MIL-STD-704F

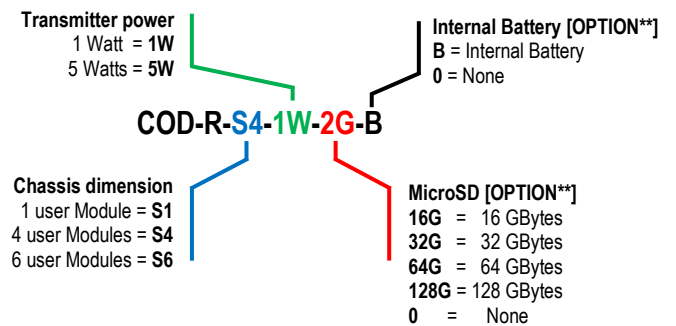
## ENVIRONMENTAL

	Specification	Remark
<b>Temperature</b>	-40°C to 65°C	Operating
	-55°C to 90°C	Storage
<b>Cooling</b>	Passive	Convection
<b>Humidity</b>	95%	Non-Cond
<b>Vibration</b>	5Hz to 2KHz	6.29 g RMS
<b>Shocks</b>	100g 11ms	Operating
<b>Acceleration</b>	> 100g linear 3 axis	Operating
<b>Altitude</b>	+ 60,000 ft	Operating
<b>MTBF</b>	> 90,000 hours	Computed
<b>EMI</b>	MIL-STD-461	Rev F

## STANDARD FUNCTIONALITY

	Specification
<b>Transmitter</b>	S-Band PCM/FM Until 14Mbps (Customizable)
<b>Power</b>	1W or 5W* (Only with S4 & S6)
<b>Telemetry</b>	PCM Irig 106 Chapter 4 standard
<b>Time synch</b>	Irig B
<b>Recording</b>	IRIG 106 Chapter 10 / DTMUX format
<b>COM port</b>	RS-232 Configuration/Maintenance
<b>Status</b>	Trough PCM or RS-232

## COD-R PART NUMBER COMPOSITION



\* 5W Transmitter takes 2 slots on available slots

\*\* Option available only on S4 and S6 systems



### OPTION - Internal Memory

Rugged Wide temperature SSD from 16GB to 64GB internal memory



### OPTION - Crash Protected Memory

ED-155 Standard Crash Protected memory



### OPTION - Internal One-shot Battery

Replaceable Internal Independent Power Supply option (battery) is available to sustain 10 to 20 minutes of power. Possibility to switch from external internal power source by discrete command.

## LIST OF AVAILABLES MODULES

Following Analog/Digital module are available on the shelf.

ANALOG TYPE	CODE	Channels	Device
<b>Analog Voltage</b>	<b>VOLT</b>	<b>8 / 16</b>	COD
<b>Current</b>	<b>AMPR</b>	<b>8 / 16</b>	
<b>ICP</b>	<b>ICP</b>	<b>6 / 9</b>	
<b>Thermocouple</b>	<b>THER</b>	<b>4 / 8</b>	
<b>Strain Gauge</b>	<b>GAGE</b>	<b>4 / 8</b>	
<b>Piezo</b>	<b>PIEZ</b>	<b>4 / 8</b>	

Example PN: **ICP-4-COD**

Customized modules available

DIGITAL TYPE	CODE	Channels	Device
<b>PCM</b>	<b>PCM</b>	<b>2 / 4</b>	COD
<b>RS 232/422</b>	<b>RS</b>	<b>2 / 4 / 8</b>	
<b>Freq counter</b>	<b>FREQ</b>	<b>2 / 4</b>	
<b>DISCRETE</b>	<b>DS</b>	<b>4 / 8 / 16</b>	
<b>CAN bus</b>	<b>CAN</b>	<b>2 / 4</b>	
<b>ARINC 429</b>	<b>A429</b>	<b>2 / 4 / 8</b>	
<b>MIL-BUS 1553</b>	<b>1553</b>	<b>1R</b>	
<b>VIDEO SD</b>	<b>VSD</b>	<b>1</b>	
<b>VIDEO HD (1080i)</b>	<b>VHD</b>	<b>1</b>	

Example PN: **RS-4-COD**

Customized modules available