

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

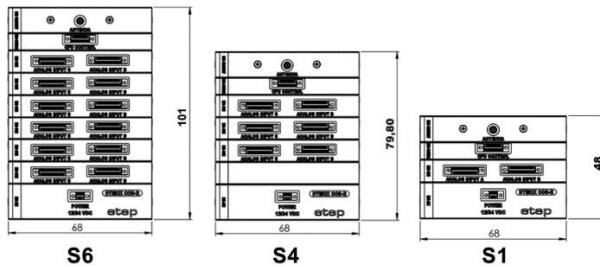
- Real time Transmission
- Very low latency data acquisition
- Harsh environment/ High velocity / Impact Test
- Low volume integration

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



ELECTRICAL

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

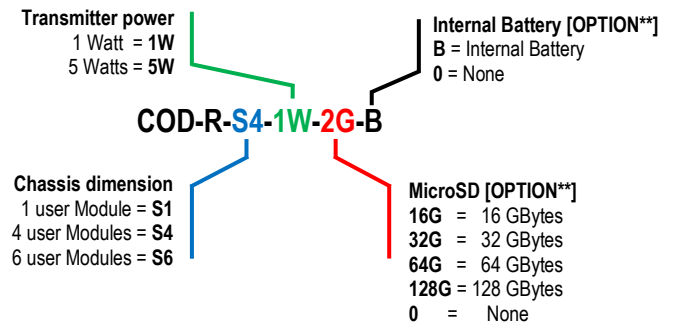
ENVIRONMENTAL

	Specification	Remark
Temperature	-40°C to 65°C	Operating
	-55°C to 90°C	Storage
Cooling	Passive	Convection
Humidity	95%	Non-Cond
Vibration	5Hz to 2KHz	6.29 g RMS
Shocks	100g 11ms	Operating
Acceleration	45g linear 3 axis	Operating
Altitude	+ 60,000 ft	Operating
MTBF	> 90,000 hours	Computed
EMI	MIL-STD-461	Rev F

STANDARD FUNCTIONALITY

	Specification
Transmitter	S-Band PCM/FM Until 14Mbps (Customizable)
Power	1W or 5W* (Only with S4 & S6)
Telemetry	PCM Irig 106 Chapter 4 standard
Time synch	Irig B
Recording	IRIG 106 Chapter 10 / DTMUX format
COM port	RS-232 Configuration/Maintenance
Status	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 MicroSD card from 16GB to 128GB 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
Analog Voltage	VOLT	8 / 16	COD
Current	AMPR	8 / 16	
ICP	ICP	4 / 8	
Thermocouple	THER	4 / 8	
Strain Gauge	GAGE	4 / 8	
Piezo	PIEZ	4 / 8	

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

Customized modules available

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

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

Customized modules available