

# TELEMETRY TRANSMITTERS with DATA ACQUISITION

## GENERAL DESCRIPTION

TUALCOM aeronautical telemetry transmitters are ultra small flight test telemetry modules suitable for missiles, rockets and mini UAVs. Various RF output options are available for different range requirements.

IRIG-106 compatible SDR based units are capable of offering data encryption, FEC and randomizer optionally.

## KEY SPECIFICATIONS

- Data Acquisition and PCM Encoding Option
- Up to 20 Mbps Data Rate
- Power Efficient
- Ultra Compact Size
- Light Weight
- Various Output Power Options
- IRIG 106 Compatible
- MIL-STD-810 Compatible



Telemetry Transmitter S-2W



Telemetry Transmitter S-10W



Telemetry Transmitter SD-10W

PCM/FM, PSK and CPM type modulation waveforms are available. Data rate is configurable up to 20 Mbps with 1 kbps steps. Flexible architectures let systems be modified easily for higher data rates, different form factors and electrical characteristics for specific applications.

Transmitters have Data Acquisition and PCM Encoding option so that the users do not need extra DA unit when acquisition from Ethernet or serial port is required.

## TECHNICAL SPECIFICATIONS

<b>Frequency Range</b>	2.2 – 2.5 GHz		
<b>Data Rate</b>	Up to 20 Mbps		
<b>Modulation Type</b>	PCM/FM, QPSK, UQPSK SOQPSK, OQPSK, BPSK, CPM		
<b>RF Output Power</b>	1 W, 2 W	5 W, 10 W	
<b>Dimensions (cm)</b>	R: 5.9 H: 1.7	R: 6.2 H: 2.8	L: 7.5 W: 5.5 H: 2.0
<b>Weight</b>	57 g	163 g	152 g
<b>Data Encryption (Optional)</b>	AES 256		
<b>Data Interface</b>	Ethernet, TTL, RS 422/485, 232		
<b>FEC (Optional)</b>	Reed Solomon (RS) and Convolutional, LDPC		
<b>Nominal Power Consumption</b>	1 W : 350 mA @ 28 V 2 W : 450 mA @ 28 V 5 W : 1.05 A @ 28 V 10 W : 1.2 A @ 28 V		