

# TELEMETRY TRANSMITTERS



## **GENERAL DESCRIPTION**

TUALCOM aeronautical telemetry transmitters are ultra small flight test telemetry modules that are 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.

PCM/FM (Tier 0), SOQPSK-TG (Tier 1) and Multi-h CPM (Tier 2) 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.

## **APPLICATION AREAS**

- Fixed/Rotary Wing Aircraft Development
- Space Launch Vehicles
- Guided Munition Development and Tests
- Flight Test and Instrumentation
- Unmanned Autonomous System Test and Development



# **TELEMETRY TRANSMITTERS**



#### Frequency Range

2.2 - 2.4 GHz

#### **Data Rate**

Up to 16 Mbps

## **Modulation Mode**

PCM/FM, SOQPSK, SPM

#### **Rf Output Power**

1W, 2W, 5W, 10W, 20W

#### Dimensions (cm)

1W: 5.9 x 1.7 x 5.5 2W: 5.9 x 1.7 x 5.5

5W: 7.5 x 2.0 x 5.5

10W: 7.5 x 2.0 x 5.5 20W: 9.6 x 3.2 x 6.0

## Weight (g)

1W / 2W:75

5W: 160 10W: 160 20W:410 **Data Encryption (Optional)** 

**AES 256** 

#### **Data Interface**

Ethernet, TTL, RS-422 / 485 / 232

#### FEC (Optional)

Reed Solomon (RS) and Convolutional.LDPC

### **Nominal Power Consumption**

1W: 350 mA @ 28 V 2W: 450 mA @ 28 V

5W: 1.1 A@ 28 V

10W: 1.4 A @ 28 V

20W: 2.8 A @ 28 V

#### **KEY SPECIFICATIONS**

- Low SWaP (Size, Weight and Power)
- Data Acquisition and
- PCM Encoding Option
- Power Efficient
- Ultra Compact Size
- Light Weight
- Various Output Power Options
- IRIG 106 Compatible
- MIL-STD-810 Compatible
- Support Data Encryption

## **TUALCOM ELEKTRONIK A.S.**





