

Transmitter Features:

- **S-Band PCM or Video Transmitters**
- **L-Band PCM or Video Transmitters**
- **RF Power can be specified from 5 Watt up to 10 Watts**
- **Programmable Centre Frequency Range of 200 MHz across the band in 0.5 MHz steps**
- **Optional four Frequency pre-sets selectable through input connector pins**
- **Programmable Frequency through a Serial Data Port to a host PC**
- **Programmable Deviation Sensitivity through a Serial Data Port**
- **100 KHz/Volt to 6 MHz/Volt nominal carrier deviation sensitivity**
- **28 Volts \pm 4 Volts DC Power**
- **High Efficiency design minimises current consumption**
- **frequency response options up to and above 10 MHz**
- **Input Impedance nominal 75 Ohm Other values including 50 Ohms and 10K Ohms available.**
- **Single Microminiature D-Type connector for Power Supply and Modulation Input as standard**
- **50 Ohm SMA RF Output Connector.**
- **Optional 50 Ohm TNC RF Output Connector Option**



The Apollotek T-910 series of Telemetry Transmitters are designed using modern efficient components and are qualified for aerospace and similar applications.

The T-910 range of transmitters utilise a crystal stabilised programmable frequency synthesiser linked to a voltage controlled oscillator and modulator driving power output sections. The transmitter characteristics are programmed by an on-board microcontroller. The T910 series of transmitters can be supplied as fixed frequency or tuneable in 0.5 MHz to 1 MHz steps over the tuning range.

An optional set of four programmed frequencies can be assigned for selection via binary coding on two of the input connector pins. Frequency and power can also be controlled through a serial programming port.

The transmitter housing is machined from solid aluminium sections using precision numerically controlled machining processes to provide a very high strength transmitter assembly.

The small transmitter components utilised in the design enable the T-910 Transmitter series to be supplied in housings of several types and configurations to meet new requirements and they can also be manufactured with mounting hole arrangements to match legacy transmitters for existing applications.

SPECIFICATIONS

General:

Standard Frequency Bands	Up to 200 MHz tuning range within 1400 MHz to 1600 MHz Up to 200 MHz tuning range within 2200 MHz to 2500 MHz
Nominal Frequency Stability	± 0.002 %
Output Power	Can be supplied in configurations providing up to 10 Watts.
VSWR	Protected against damage from any VSWR

Modulation:

Modulation Type	FM as standard. Other modulation and encryption support schemes are available including CPM and Orthogonal schemes
Input Signal Coupling	AC as standard. DC option available
Frequency Response	10 Hz to 7 MHz ± 1.5 dB as standard (other ranges available)
Carrier Deviation Range	Nominal 100 KHz to 6 MHz per Volt rms range – user defined

Power Requirements:

Voltage	28V ±4 Volts DC (Other supply voltage options available)
Current	Nominal 1.5 A for 10 Watts output at 25° Centigrade
Isolation	Power and Modulation return are common to case ground

Mechanical:

Nominal Dimensions	Standard 63.5 mm wide 89 mm long and up to 35 mm high excluding connectors
Power, Modulation and Programming Connector	15 way microminiature D-Type (SMA option for Modulation)
RF Output Connector	SMA as standard TNC option on 35 mm height package

Environmental:

Normal Operating Temperature	-30° Centigrade to +70° Centigrade baseplate temperature
Vibration	>20g sine, 0.1 g ² random, 20Hz to 2000Hz, in any axis
Shock	100g for 1 ms in three mutually perpendicular axes
Acceleration	100g in three mutually perpendicular axes

Specifications are subject to change without notice