



# TELEMETRY TRANSMITTER

## MODEL BA-SB-DTX10-V1

### General:

The New B.A. PCM/FM and SOQPSK transmitter is designed to allow the transmitter to be a general building block to multiple projects, the unit allows changing of almost every basic Transmitter parameter, making it fit to all modulation rates and BW. The unit allows control on Frequency, Output power, Pre-mod Filter, Deviation and allows monitoring of FWD/RTN Power and Temperature.

Operating with and without external clock allows the unit to match exactly to former B.A. transmitter

The unit can be configured via a simple RS485 interface.



### SPECIFICATIONS:

**Frequency:** 2185MHz ÷ 2400MHz ( Other ranges available )  
**Frequency Steps:** 100KHz  
**Frequency Stability:** ± 5 ppm  
**Max Power Output:** 10W min  
**Power steps resolution :** 500mW in 1dB Typical Steps ( Accuracy ±0.5dB)  
**Output Impedance:** 50 Ohm, VSWR 2:1 max  
**Bit Rate:** 1 ÷ 25MBPS  
**Modulations Possible :** PCM/FM , SOQPSK  
**Supply Voltage:** 14 – 36 Vdc (Reverse voltage protection)  
**Current consumption:** 50W max Sby mode available.  
**Temperature Accuracy:** +/-2 deg Cel  
**Temperature Sensor:** 0.5 – 3V.  
**FWD power Accuracy:** +/-1 dB

### ENVIRONMENTAL:

**Temperature:** -35° ÷ +80°C

Non Operating: -40° ÷ +90°C

**Vibration:** Random, 12g from 20 to 2000Hz ( 3 axis)

**Shock:** 100g, 11 ms , ½ sine. ( 3 axis)



**Acceleration:** 100g, 3 axis

**Altitude:** Unlimited

**Humidity:** 90%

## **MECHANICAL:**

**Size:** 76 X 51 X 19mm (excluding connectors)

**Weight:** 155gr

### **Connectors:**

RF –SMA FEMALE,  
Video, dc,- MDM 15 pin

1. Mod in RS422 (+)
2. Mod in RS422 (-)
3. GND
4. Supply returned/GND.
5. Supply voltage (14-35V)
6. Clock in RS422 (+)
7. Clock in RS422 (-)
8. GND.
9. Supply voltage (14-35V)
10. On/off (NC – ON, Short, – OFF)
11. Hi/Low Power output (Short, NC – Hi , TTL\* Hi – Low \*\*)
12. RS485 (+) - CONTROL
13. RS485 (-) - CONTROL
14. TEMPERATURE MONITOR
15. FWD POWER MONITOR

\*\* Low Power Can be set by user Control.

**Name plate (On top panel):** BA Logo, Model #, Serial number, Date of Production (WW, Year).



**OTHER:**

**Replace ability:** Each unit can be replaced with another no need of calibration.

**Documents:** Each unit supplied with C.O.C and ATR.

**Mechanical Drawing:**

