



# ANTENNA EXPERTS

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Model # UAT-978-1090 960 – 1220 MHz. 2.14 dBi. Gain

## UAT / ADS-B DUAL BAND ANTENNA

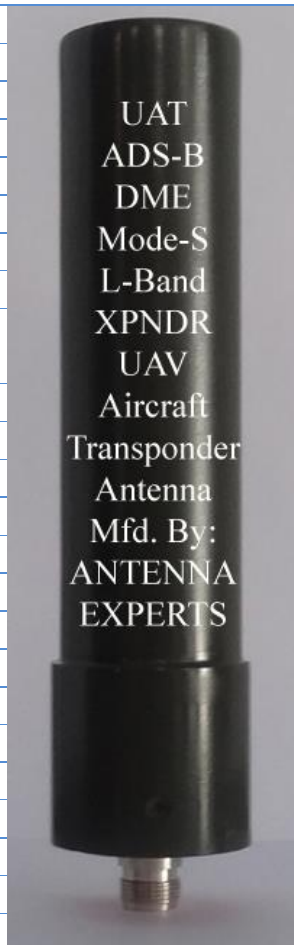
**DESIGN FEATURES:** UAT-978-1090 is a dual band vertical polarized, omni-directional L band antenna operating from 960-1220MHz, compliant with UAT 978MHz and ADS-B 1090MHz frequency bands. This antenna also supports 1030-1090MHz ATC Mode-S and 976-1213MHz DME applications. This UAT antenna is a multi band, an Omni-directional broadband, higher performance, coaxial dipole type antenna designed specifically for use in aircraft for UAT application. The UAT antenna uses extended stub in order to keep the radiator away from aircraft so that the interference caused by aircraft body could be minimize. The antenna does not use any junction to prevent RF inter-modulation and is completely protected within a high-tech ruggedized fiber glass radome to ensure survivability in the worst environments. The compact size of multi-band UAT antenna allows easy handling and shipping. Bulkhead N-Female connector is fixed at the bottom of antenna which allow smooth mounting of antenna thru aircraft chassis.

**CONSTRUCTIONS:** This UAT, DAS-B, DME antenna is rugged all weather model uses 6063T6 ultra corrosion resistant architectural aluminum alloy and does not require any field tuning or adjustments. The special stub matching is used for smooth VSWR and constant gain over the entire frequency band. This UAT antenna consist of large diameter brass radiating element, vertically positioned and enclosed in fiber glass tube. The antenna termination is enclosed at bottom of the antenna for complete weather protection. The antenna is free from ground plane and can be installed on metallic or non-metallic surface which eliminates the distortion of the radiation pattern and ensures a true omni-directional horizontal pattern. One holes of 16mm diameter is required to mount the antenna. A rubber "O" gasket and high quality nuts are supplied with the antenna to mount the same on aircraft body.

### ELECTRICAL SPECIFICATIONS:

Frequency Range	960 - 1220 MHz (L-Band XPNDR) 1090 +/-1MHz (ADS-B) 978MHz (UAT) 1030-1090MHz (Mode-S) 976-1213MHz (DME)
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Gain	2.14 dBi.
Bandwidth	Entire Band
Polarization	Vertical
Input Impedance	50 Ohms.
Radiation Pattern	Omni Directional
-3 dB. Vertical Beam-width	76 Degrees
VSWR – Better Than	2:1
RF Power Handling Capacity	150 Watts.
Input Termination	N-Female
<b>MECHANICAL SPECIFICATIONS:</b>	
Mounting Hardware Studs	Stainless Steel
Gross Weight	650 Grams
Wind Rating	300 Knots TAS
Overall Length	235 mm
Shipping Length	250 mm
Radiating Elements Materials	6063T6 Aluminum Alloy
Mounting Holes Diameter	16 mm
Enclosure Materials	Fiberglass/ABS
Enclosure Outer Diameter	38 mm
<b>ENVIRONMENTAL SPECIFICATIONS:</b>	
Operating Temperature	(-) 30 to +70 Degrees Celsius
Storage Temperature	(-) 40 to +80 Degrees Celsius
Humidity	0 to 95% RH
Altitude	35000 Feet
Vibration	30 Gs



Note: All information contained in the datasheet is subject to change without any prior notice.