

20-2041

Active GPS (L1 & L2) Antenna TSO
Compliant



Key features:

- **Active GPS Antenna**
- **TSO-C190, MSO-C144 and WAAS compliant**
- **M-Code**

The 20-2041 active GPS antenna operates in the GPS L1 and L2 bands. The antenna is certified to military and civil operational performance standards, including WAAS operation.

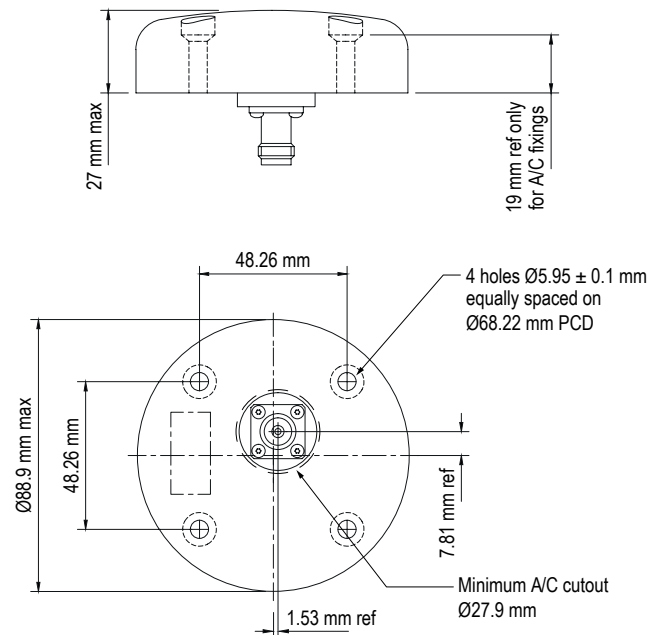
The antenna operates with hemispherical coverage with Right Hand Circular Polarisation (RHCP) reception, excellent symmetry and cross-polar performance.

The low noise Antenna Electronics (AE) amplifies signals in the two GPS bands (separately for maximum performance), while rejecting out-of-band signals.

The AE also incorporates a limiter circuit protection from high power in-band signals. Power is applied to the AE on the centre conductor of the RF connector. The minimum AE gain is 26.5 dB.

The antenna element and AE are housed within a high performance shell which is sealed to an aluminium enclosure/baseplate. The shell provides protection against rain, ice, fluid contamination and lightning.

CHELTON



ELECTRICAL

Frequency Range	L1: 1575.42 MHz ± 12 MHz L2: 1227.60 MHz ± 12 MHz
Primary Power	4.5 V to 14.4 V, 60 mA maximum
Polarisation	Predominantly RHCP (Axial Ratio ≤ 3 dB on boresight.)
Impedance	50 ohm (nominal)
VSWR (Return Loss)	2.0:1 (≥ 9.5 dB)

MECHANICAL

Height	27 mm (1.06")
Width	88.9 mm (3.5")
Length	88.9 mm (3.5")
Max Weight	0.25 kg (0.55 lbs)
Connectors	TNC Female
Mounting	4 holes fixed location

ENVIRONMENTAL

MSO for L1 and L2	MSO-C144
TSO (L1 band only)	TSO-C190
MOPS - Active Airborne Global Navigation Satellite System (GNSS) Antenna	RTCA DO-301
MOPS - WAAS	RTCA DO-229
Environmental Performance	RTCA DO-160E, MIL-STD-810G
Direct Lightning	EUROCAE ED-84