



C7 SERIES, C98-1 UHF ANTENNAS

The C7 Series and C98-1 are low-profile, lightweight ultra-high frequency (UHF) communication antennas designed for low drag and minimum height applications. Both antennas are suitable for all aircraft including supersonic. These antennas are rated for an altitude of 70,000 feet and speed at Mach 2.

The C7-3 Antenna uses a two-piece metal blade construction with an internal composite separator that is bonded and riveted in place. This connection is then permanently sealed with a fiberglass band to provide additional strength and sealing properties. The C7-3 military nomenclature is AT-840/ARC (also functionally interchangeable with the AT-256). This antenna is supplied with a white polyurethane finish.

The C7-8/A and the C98-1 use the same basic construction techniques as the C7-3, with a different mounting hole pattern and connector location. The C7-8/A and C98-1 are identical mechanically, however, the C7-8/A is supplied with a white polyurethane finish, while the C98-1 is supplied with a dark Astrocoat rain-erosion coating specified in MIL-C-83231.

Other C7 Series antennas are available. The C7-12/A is standard on the Harrier aircraft and has a steel base plate.

| ELECTRICAL | | | |
|---------------------------------------|---|--|---|
| | C7-3 | C7-8/A | C98-1 |
| Frequency range/max VSWR | 225-275 MHz / 2.5:1 275-380 MHz / 2.0:1 380-400 MHz / 2.5:1 | 225-250 MHz / 2.5:1 250-420 MHz / 2.0:1 | 225-230 MHz / 2.7:1 230-250 MHz / 2.5:1 250-420 MHz / 2.0:1 |
| Gain (all models) | Similar to $\lambda/4$ stub | | |
| Impedance (all models) | 50 ohms | | |
| Polarization (all models) | Vertical | | |
| Radiation pattern (all models) | Omnidirectional | | |
| DC resistance (all models) | Open circuit | | |
| Power handling (all models) | 100 W CW | | |
| MECHANICAL | | | |
| Weight | 13 oz. max (0.37 kg) | 13 oz. max (0.37 kg) | 17 oz. max (0.48 kg) |
| Connector (all models) | N female | | |
| Side load (all models) | 12 psi | | |
| Shock (all models) | 30 g | | |
| Military (all models) | MIL-A-26336 MIL-E-5400 | | |



KEY FEATURES

- > Rugged design
- > Lower profile compared to similar performing UHF blades.
- > Ideal for both fixed- and rotary-wing platforms
- > Meets MIL-E-5400 specification

For further details and specifications, contact the factory at antenna.info@L3Harris.com

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