

UMBRELLA ANTENNA

The "Umbrella" antenna has a gain of 3 dB compared with a mast of same height and a higher bandpass. This characteristic is particularly appreciated when approaching an airfield and makes possible the suppression of day and night lightings. Moreover it reduces the lightning risks.

The tuning induction coil with high overvoltage is installed in the cabinet of DAA 9400 system (automatic tuning unit) associated with the antenna.

The maintenance of this antenna is quite easy since the insulating induction coil is located at the foot of the antenna.



The radiating part is constituted by the mast, and the upper part of the staywires forms the terminal capacity of the antenna.

The antenna includes :

- a mast with 5 elements, 2.50 m long each,
- a terminal capacity constituted of 4 conductors, 4m long each.



ANTENNA - GENERAL CHARACTERISTICS

- **Height:**
14 m (can be modulated)
- **Frequency range:**
200-700 kHz
- **RF carrier power:**
100 W NON/A1A - NON/A2A
- **Capacity:**
about 240 pF
- **Impedance:**
50 ohms

DAA 9400 AUTOMATIC TUNING UNIT

The DAA 9400 ensures the automatic tuning keeping of the N.D.B. umbrella antenna despite the possible variations of the tuning capacity caused by the fluctuations of the climatic conditions on the site.

It is installed in a waterproof cabinet which is fixed on the insulating part of the mast base of the umbrella antenna.



DAA 9400 - GENERAL CHARACTERISTICS

- **Power supply:**
48 V (typical)
- **Consumption:**
< 200 mA
- **RF carrier power:**
100W NON/A1A-NON/A2A
- **Antenna impedance:**
50 ohms
- **Adjustable impedance:**
2.5-5-7.5-10-15-20 ohms
- **Measures on 50 ohms:**
Direct power, reflected power, antenna intensity
- **Visual signalling:**
Power supply, carrier, modulation, limit stop, tuning localization
- **Limit stop signalling:**
by series link of the change-over unit
- **Lightning protection:**
spheres discharger located on the cabinet

DAA 9400 T - DAA 9400 P VERSIONS

The DAA 9400 T ensures the tuning (and its automatic keeping) if a T antenna or a radiating mast.

The DAA 9400 P ensures the tuning (and its automatic keeping) of a "long wire" antenna installed on "off-shore" platforms.

DAA 9400 I VERSION

DAA 9400 I similar to DAA 9400, but equipped with a microcontroller on the control PCB allowing to automatically select the impedance which gives the minimum reflected power.



Data subject to change