

SIRIO 827

26.4...28.4 MHz Tunable Base Station Antenna

DESCRIPTION

The most modern technology and the most advanced instruments have been used for the realization of SIRIO 827, the new base antenna with remarkable characteristics. It is made of Silicon Magnesium Aluminium tubes of big dimensions drawn and cemented on the surface to get the maximum strenght of the main whip. The coil, made of enamelled copper wire of big section, has been specially planned in order to bear high powers. It adopts the exclusive system C.A.C.S. (Coil Auto-Cooling System) which allows the auto-cooling by a finned support that keeps the coil hanging up allowing the air circulation.

SPECIFICATIONS

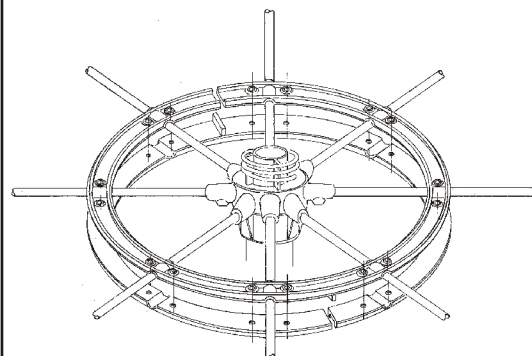
Electrical Data

| | |
|--------------------------|---------------------------------------|
| Type | : 5/8 λ Ground Plane |
| Frequency range | : 26.4...28.4 MHz tunable (see table) |
| Impedance | : 50 Ω |
| Radiation (H-plane) | : 360° omnidirectional |
| Polarization | : Linear Vertical |
| Gain | : 1.5 dBd, 3.65 dBi |
| Bandwidth @ SWR ≤ 2 | : ≥ 2000 KHz |
| SWR @ res. freq. | : ≤ 1.1 |
| Max Power | : 1000 Watts (CW) continuous |
| | : 3000 Watts (CW) short time |
| Feed system/ position | : Transformer DC-ground / base |
| Connector | : UHF-female |

Mechanical Data

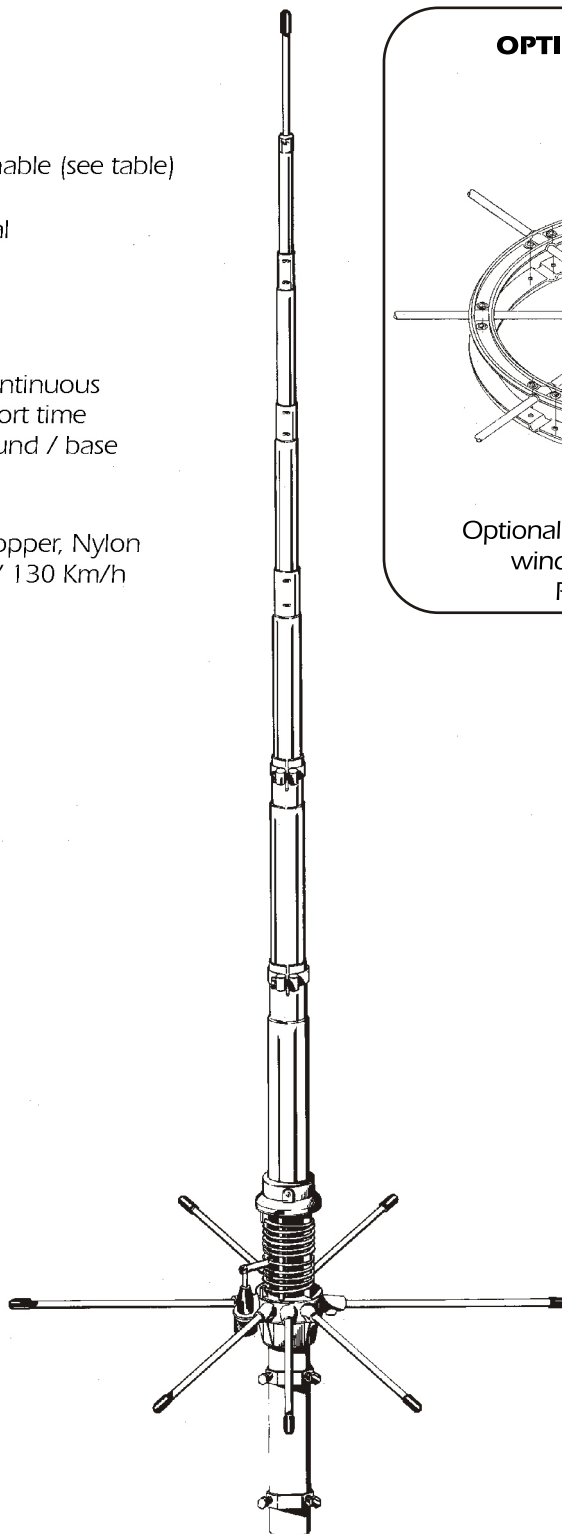
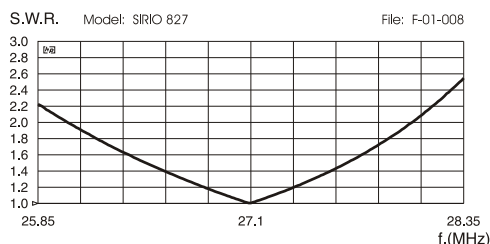
| | |
|-----------------------|-----------------------------------|
| Materials | : Aluminium, Steel, Copper, Nylon |
| Wind Load/ Resistance | : 264 N @ 150Km/h / 130 Km/h |
| Wind surface | : 0.23 m ² |
| Length (approx.) | : 6700 mm |
| Weigth (approx.) | : 6000 gr |
| Radial lenght | : 1400 mm |
| Mounting Mast | : \varnothing 35-39 mm |

OPTIONAL ANTI NOISE NYLON RING



Optional nylon ring to reduce the wind noise of the radials.
P/N: 2511011.00

TYPICAL S.W.R. RESPONSE



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TUNING TABLE

| Freq. (MHz) | L (mm) |
|-------------|--------|
| 26.4 | 670 |
| 27.0 | 457 |
| 27.185 | 400 |
| 27.5 | 300 |
| 28.0 | 137 |
| 28.4 | 18 |

Mounting needed tools:

- n. 1 tape rules (meter)
- n. 1 phillips screwdriver
- n. 1 10 mm open key
- n. 1 13 mm open key

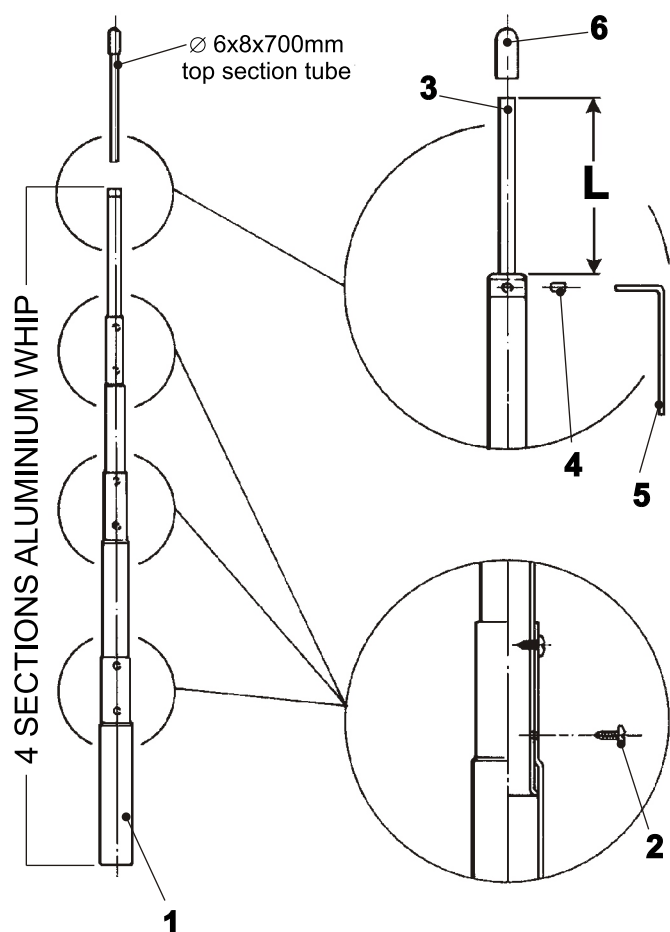
Parts List

| Pos | Q.ty | Description |
|-----|------|--|
| 1 | 1 | 4 sections telescopic aluminium whip |
| 2 | 6 | Ø 3.9x6.5 phillips tapping screws |
| 3 | 1 | Ø 6x8x700mm top section tube |
| 4 | 1 | M4x4 hexagon socket set screws cup point |
| 5 | 1 | 2mm hexagonal key |
| 6 | 9 | PVC caps for Ø 8 mm aluminium tube |
| 7 | 1 | Ø 33.5x37x1100 mm aluminium tube |
| 8 | 1 | Ø 32-35 mm hose clamp |
| 9 | 1 | Bottom section assembled with coil and connector |
| 10 | 1 | Ø 40-43 mm hose clamp |
| 11 | 8 | Ø 6x8x1400mm aluminium tubes |
| 12 | 8 | brass radials reinforces |
| 13 | 8 | M6x6 hexagon socket set screws cup point |
| 14 | 1 | 3mm hexagonal key |
| 15 | 2 | AISI 302 stainless steel rings |
| 16 | 4 | M8x30 exagon head screws |
| 17 | 4 | M8 square nuts |

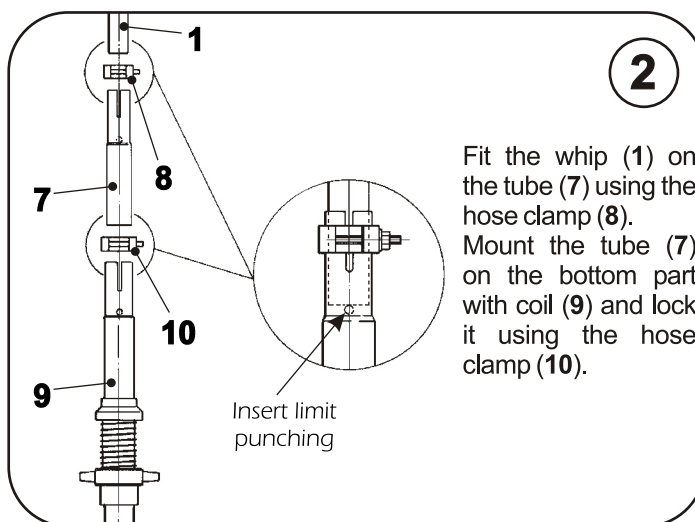
MOUNTING INSTRUCTIONS

Pull out the sections of telescopic aluminium whip (1) and lock they using the screws (2). Insert the top aluminium tube (3) at L (see tuning table for frequency) and lock it using the screw (4) and 2 mm hexagonal key (5). Mount the PVC cap (6).

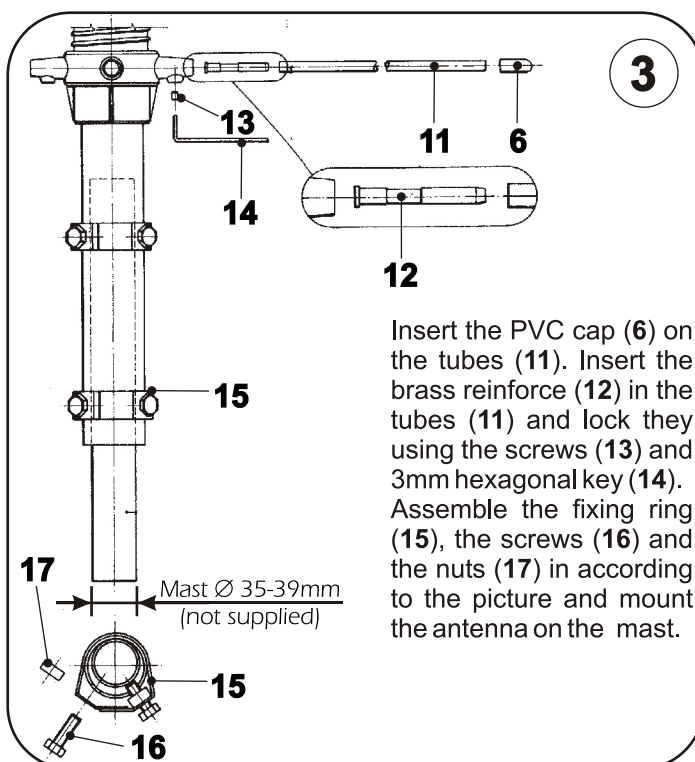
NOTE: Use the table just as a guide. For fine-tuning please use an SWR-meter



1



2



3



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