SIRIO 2000 series
26.4..28.2 MHz Tunable Base Station Antennas

DESCRIPTION
Hi-quality base station antennas tunable from 26.4 to 28.2 MHz. They are made of anti-corodal aluminium tubes and supplied with polythene jointing sleeves to guarantee a perfect waterproofing. Strong and easy to install, they allow very good links.

SPECIFICATIONS

Electrical Data
- Type: 5/8 λ Ground Plane
- Frequency range: 26.4...28.2 MHz tunable (see table)
- Impedance: 50 Ω
- Radiation (H-plane): 360° omnidirectional
- Polarization: Linear Vertical
- Gain: 1.3 dBi, 3.45 dBi
- Bandwidth @ SWR ≤2
  - SIRIO 2008, SIRIO 2012: ≥ 1750 KHz
  - SIRIO 2016: ≥ 2100 KHz
- GR @ 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, Copper, Nylon, Brass, Galvanized Steel
- Wind Load / Resistance: 166 N @ 15Km/h / 130 Km/h
- Wind surface: 0.14 m²
- Length (approx.): 6100 mm
- Weight (approx.): 5300 gr
- Radii length
  - SIRIO 2008, SIRIO 2012: 1320 mm
  - SIRIO 2016: 700 mm
- Mounting Mast: Ø 40-50 mm

HIGH POWER IMPEDANCE TRANSFORMER

Construction details:
- Coil cover made of transparent anti-shock material.
- Low loss coil support with finger spacers.
- Ø 75mm coil made of Ø 4.5mm copper wire.
- UHF-female connector with protection cap.
- Discharge holes for possible condensations.

SIRIO 2000 series features:
- SIRIO 2008: with 8 G.P. radials length=1320mm
- SIRIO 2012: with 12 G.P. radials length=1320mm
- SIRIO 2016: with 16 G.P. radials length= 700 mm

HI-QUALITY ANTENNAS MADE IN ITALY
**TUNING TABLE**

<table>
<thead>
<tr>
<th>Freq. (MHz)</th>
<th>L (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.4</td>
<td>545</td>
</tr>
<tr>
<td>27.0</td>
<td>381</td>
</tr>
<tr>
<td>27.185</td>
<td>330</td>
</tr>
<tr>
<td>27.5</td>
<td>241</td>
</tr>
<tr>
<td>28.0</td>
<td>101</td>
</tr>
<tr>
<td>28.2</td>
<td>45</td>
</tr>
</tbody>
</table>

**Mounting needed tools:**
- n. 1 tape rules (meter)
- n. 1 phillips screwdriver
- n. 1 8 mm open key
- n. 1 10 mm open key
- n. 1 13 mm open key

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**Parts List**

<table>
<thead>
<tr>
<th>Pos</th>
<th>Q. ly</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>5 sections telescopic aluminium whip</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>plastic jointing sleeves (4 different sizes)</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>Ø 3.9x6.5 mm phillips tapping screws</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>top section with cage</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>M4x4 hexagon socket set screw cup point</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>2 mm hexagonal key</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>Bottom section assembled with coil and connector</td>
</tr>
<tr>
<td>8</td>
<td>6</td>
<td>M8 washers</td>
</tr>
<tr>
<td>9</td>
<td>6</td>
<td>M8 spring lock washers</td>
</tr>
<tr>
<td>10</td>
<td>6</td>
<td>M8 hexagonal nuts</td>
</tr>
<tr>
<td>11</td>
<td>3</td>
<td>M8x200 mm U-bolts</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>Ø 26-28 mm hose clamps</td>
</tr>
<tr>
<td>13</td>
<td>8/12</td>
<td>Ø 6x6x1320mm radials aluminium tubes with joint (SIRIO 2008/12)</td>
</tr>
<tr>
<td>16</td>
<td>8/12/16</td>
<td>Ø 6x8x700mm radials aluminium tubes with joint (SIRIO 2016)</td>
</tr>
</tbody>
</table>

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**MOUNTING INSTRUCTIONS**

1. Pull out the sections of telescopic aluminium whip (1), insert the jointing sleeves (2) and lock them using the screws (3). Insert the top section with the cage (4) at L (see tuning table for frequency) and lock it using the screw (5) and 2 mm hexagonal key (6).

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

2. Fit the whip (1) on the bottom section (7). Well lock the hose clamps (12) by using the suitable 8mm open key.

3. Mount the bottom section with coil (7) on the mast using parts (8), (9), (10) and (11) in accordance to the picture.

4. Mount the PVC cap (14) at the end of radials tubes (13) and lock they on the coil by using the suitable 10mm open key.

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**SIRIO antenne**

HI-QUALITY ANTENNAS MADE IN ITALY

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