



FLSU-440-470-BSA Antenna

Description

Overview

The FLSU-440-470-BSA is a high-performance collinear, omnidirectional base station and marine antenna designed for the 440-470 MHz frequency range. Manufactured by Fortilink System (UK), it delivers reliable communication with excellent durability in harsh and corrosive environments.

The antenna features a robust fiberglass construction with low wind load and includes a universal "C" mounting bracket made of epoxy-coated, seawater-resistant aluminum. All metal components are DC grounded to minimize noise and ensure stable operation.



Specifications

| Electrical | | | | | | | | | |
|------------------------------|--|------------|-------------|----------------|----------------|----------------|----------------|----------------|--|
| Model | FLSU-440-470-BSA | | | | | | | | |
| Antenna Type | Coaxial dipole, broad-banded | | | | | | | | |
| Frequency Range of operation | 440 - 470 MHz (see model list below for sub-models) | | | | | | | | |
| Bandwidth | 30 MHz (depending on model) | | | | | | | | |
| Max. Input Power | 150 W | | | | | | | | |
| Polarization | Vertical | | | | | | | | |
| 3 dB Beamwidth, E-Plane | 80° | | | | | | | | |
| 3 dB Beamwidth, H-Plane | Omnidirectional | | | | | | | | |
| Impedance | 50 Ω | | | | | | | | |
| Gain | 3 dBd (5.2 dBi) | | | | | | | | |
| VSWR | <table border="1"> <tr> <td>VWSR ≤ 1.5</td> <td>VWSR ≤ 1.75</td> </tr> <tr> <td>1. 440-470 MHz</td> <td>4. 146-163 MHz</td> </tr> <tr> <td>2. 420-450 MHz</td> <td>5. 155-175 MHz</td> </tr> <tr> <td>3. 406-450 MHz</td> <td></td> </tr> </table> | VWSR ≤ 1.5 | VWSR ≤ 1.75 | 1. 440-470 MHz | 4. 146-163 MHz | 2. 420-450 MHz | 5. 155-175 MHz | 3. 406-450 MHz | |
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| 2. 420-450 MHz | 5. 155-175 MHz | | | | | | | | |
| 3. 406-450 MHz | | | | | | | | | |
| Antistatic Protection | All metal parts DC-grounded (Connector shows a DC-short) | | | | | | | | |
| HCM Code(s) | HCM000ND040 ,00DE00 | | | | | | | | |

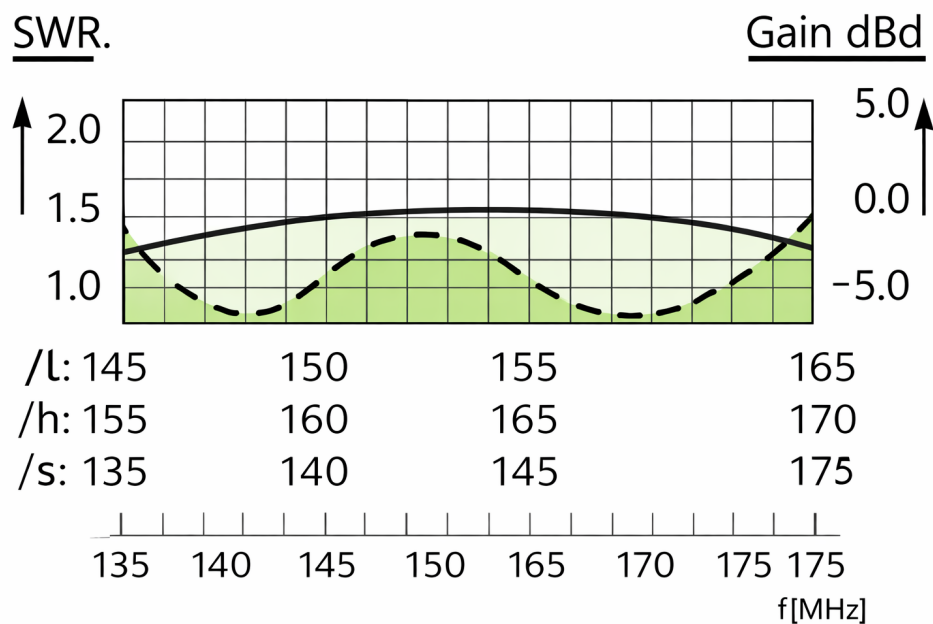
Universal, Unity-Gain Base Station and Marine Antenna for 440 MHz Band



FORTILINK SYSTEMS

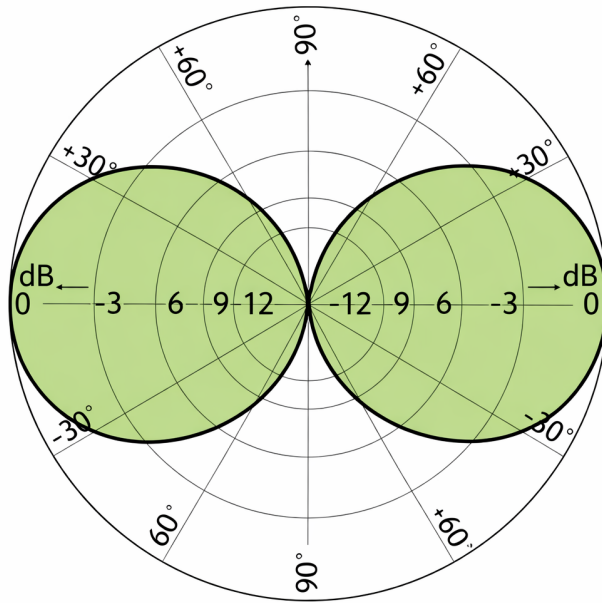
| Mechanical | |
|-----------------------------|---|
| Connection(s) | N(f) |
| Materials | Shroud : Polyurethane-coated glass fiber Mounting bracket : Seawater resistant aluminum, epoxy-coated Clamps: Stainless steel |
| Color | White (RAL 9003) |
| Wind Area | 0.0172 sq. m / 0.19 sq. ft |
| Wind Load | 22 N (160 km/h) |
| Dia. At Top End | 8 mm / 0.31 in. |
| Dia. At Bottom End | 16 mm / 0.63 in. |
| Length | Approx. 1300 mm / 51.18 in. |
| Weight | Approx. 0.76 kg / 1.68 lb. |
| Mounting | On 16 to 54 mm / 0.63 x 2.13 in. dia. Mast tube |
| Environmental | |
| Operating Temperature Range | -30 °C to +70 °C |
| Survival Wind Speed | 200 km/h |
| Ingress Protection | IP66 |

Typical VSWR and Gain Curve

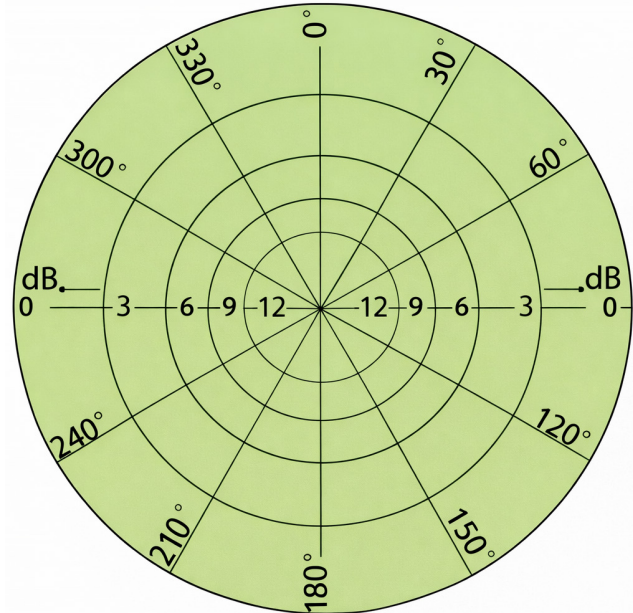




Radiation Pattern

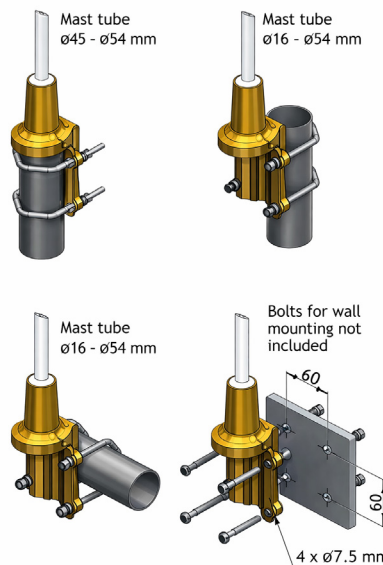


E-Plane



H-Plane

Multipurpose Mounting Bracket



Note:

The antenna is delivered with DC-connection between the antenna element and the mounting bracket.

Model Ordering Information:

| Model | Description | Type | Frequency Range |
|------------------|------------------------------|------|-----------------|
| FLSU-440-470-BSA | Coaxial dipole, broad-banded | N(f) | 440-470 MHz |
| FLSU-440-450-BSA | Coaxial dipole, broad-banded | N(f) | 420-450 MHz |
| FLSU-406-450-BSA | Coaxial dipole, broad-banded | N(f) | 406-450 MHz |