

SY307R

Yagi directional antenna, 10 dBd gain, radome enclosed, HD, 406-470 MHz

- Heavy duty, radome enclosed 10 dBd gain directional antenna
- Ideally suited to harsh environment applications

The SY307R is a heavy duty, radome enclosed 10 dBd gain directional antenna, ideally suited to harsh environment applications. This extremely rugged antenna will withstand 110 mph (177 km/h) winds, with up to 0.5 of radial ice.



| Model | Description | Pattern |
|-------------------------------|--|-------------|
| SY307R-HF1SNF | 10 dBd gain, N (female) connector, 406-430 MHz | Directional |
| SY307R-HF2SNF | 10 dBd gain, N (female) connector, 450-470 MHz | Directional |
| SY307R-HF3SNF | 10 dBd gain, N (female) connector, 430-450 MHz | Directional |

www.sinctech.com

| Region | United States | Europe, Middle East and Africa | Caribbean and Latin America | Canada and rest of the world |
|-----------------------------|-----------------------|--------------------------------------|--------------------------------|--|
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| Product Specification Sheet | | SY307R | | Dated: 05-02-10 |

[SY307R-HF1SNF](#)

[SY307R-HF2SNF](#)

[SY307R-HF3SNF](#)

Electrical Specifications

| | | | |
|-------------------------------|------------------------|------------------------|------------------------|
| Frequency Range, MHz | 406 to 430 | 450 to 470 | 430 to 450 |
| Gain (nominal), dBd (dBi) | 10 (12.1) | 10 (12.1) | 10 (12.1) |
| Input VSWR (max) | 1.5:1 | 1.5:1 | 1.5:1 |
| Polarization | vertical or horizontal | vertical or horizontal | vertical or horizontal |
| Pattern | Directional | Directional | Directional |
| Horizontal beamwidth, degrees | 48 | 48 | 48 |
| Vertical beamwidth, degrees | 42 | 42 | 42 |
| Average Power Input (max), W | 250 | 250 | 250 |
| Lightning protection | DC ground | DC ground | DC ground |
| Bandwidth, MHz | 24 | 20 | 20 |
| Front-to-back ratio (typ), dB | 15 | 15 | 15 |

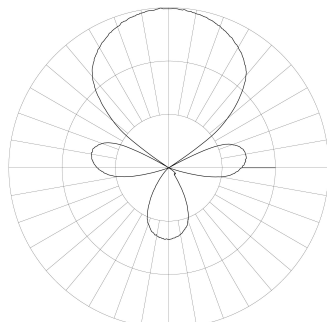
Mechanical Specifications

| | | | |
|----------------------------------|------------------------|------------------------|------------------------|
| Connector | N (female) | N (female) | N (female) |
| Length/ Height, in (mm) | 30 (762) | 30 (762) | 30 (762) |
| Width, in (mm) | 13 (330) | 13 (330) | 13 (330) |
| Weight, lbs (kg) | 19 (8.6) | 19 (8.6) | 19 (8.6) |
| Actual Shipping weight, lbs (kg) | 20 (9.1) | 20 (9.1) | 20 (9.1) |
| Shipping dimensions, in (mm) | 17x17x35 (432x432x889) | 17x17x35 (432x432x889) | 17x17x35 (432x432x889) |
| Mounting hardware | #4 clamp | #4 clamp | #4 clamp |

Environmental Specifications

| | | | |
|--|--------------------------|--------------------------|--------------------------|
| Temperature range, °F (°C) | -40 to +158 (-40 to +70) | -40 to +158 (-40 to +70) | -40 to +158 (-40 to +70) |
| Wind Loading Area (Flat Plate Equivalent), ft ² (m ²) | 1.4 (0.13) | 1.4 (0.13) | 1.4 (0.13) |

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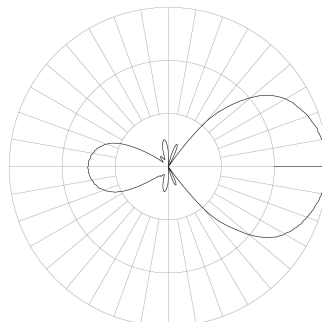


MEASURED RADIATION PATTERN
VERTICAL POLARIZATION

Azimuth
Relative Gain - 10 dB per Division

SY307R-HF1SNF

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MEASURED RADIATION PATTERN
VERTICAL POLARIZATION

Elevation
Relative Gain - 10 dB per Division

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