

MICROSTRIP PATCH ANTENNA ARRAY

8.0 GHz TO 15.0 GHz

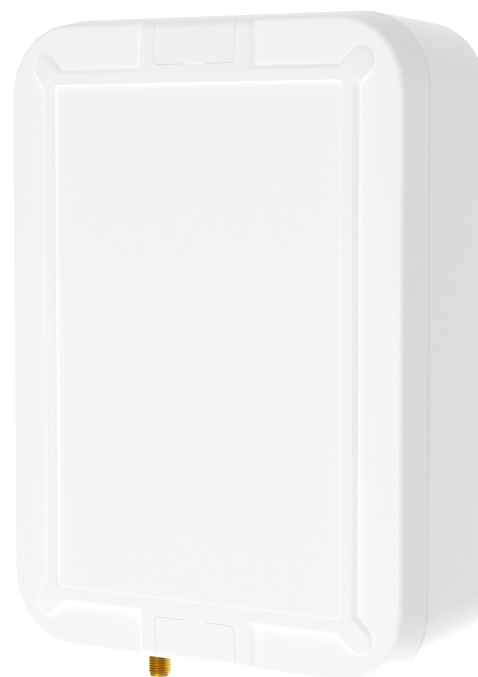
MPA8000

KEY FEATURES

- Linearly polarized directional antenna for X-band and the lower Ku-band
- Planar microstrip patch array design enables a much lower profile compared to horn antennas
- High gain (up to 17 dBi)
- Symmetric main beam pattern
- VSWR typically below 2:1
- High-quality microwave substrates used to minimize losses
- Water-resistant enclosure with multiple mounting options
- Professionally designed and hand-tested by engineers in the United States

DESIGN SPECIFICATIONS

- Design: 16-element microstrip patch antenna array
- Operating Frequency: 8.0 GHz to 15.0 GHz
- Polarization: Linear (horizontal/vertical based on orientation)
- Connector: SMA Female
- Construction: Plastic enclosure with internal PCB antenna
- Mounting: Two 4 mm diameter mounting holes (see diagram on page 4) and adapters included for pole-mounting
- Length: 5.1 in [130 mm]
- Width: 1.8 in [45 mm]
- Height: 6.7 in [171 mm] (not including SMA connector)
- Weight: 13.5 oz [382 g]

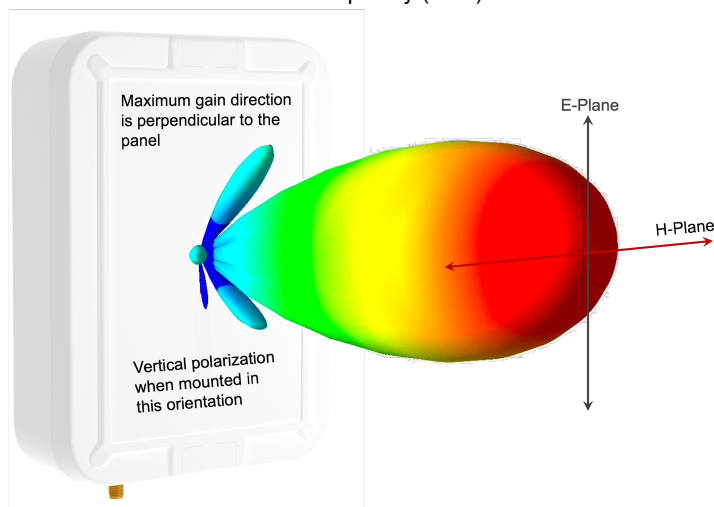
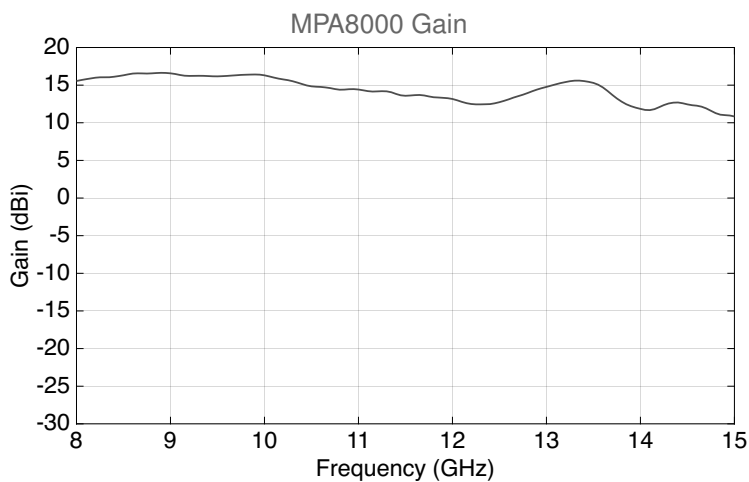
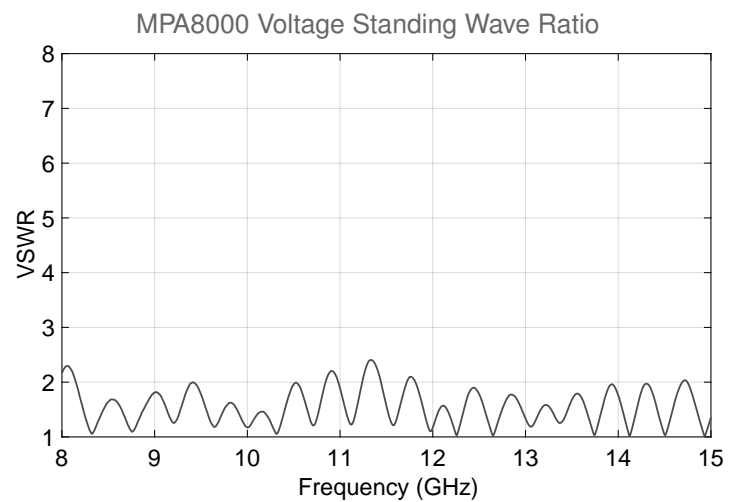


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PERFORMANCE SPECIFICATIONS

| Parameter | | Frequency | Min. | Typ. | Max. | Unit |
|-------------|---------|---------------------|--------------|------|------|----------|
| VSWR | | 8.0 GHz – 15.0 GHz | – | 1.6 | 3.0 | – |
| Gain | | 8.0 GHz – 12.4 GHz | 10.0 | 14.0 | 17.5 | dBi |
| | | 12.4 GHz – 15.0 GHz | 8.0 | 12.0 | 16.0 | |
| HPBW | E-Plane | 8.0 GHz – 15.0 GHz | 9 | 16 | 22 | deg. |
| | H-Plane | | 10 | 16 | 21 | |
| Input Power | | 8.0 GHz – 15.0 GHz | – | – | 10 | W |
| Impedance | | – | 50 | | | Ω |
| Connector | | – | SMA (female) | | | – |

TYPICAL PERFORMANCE

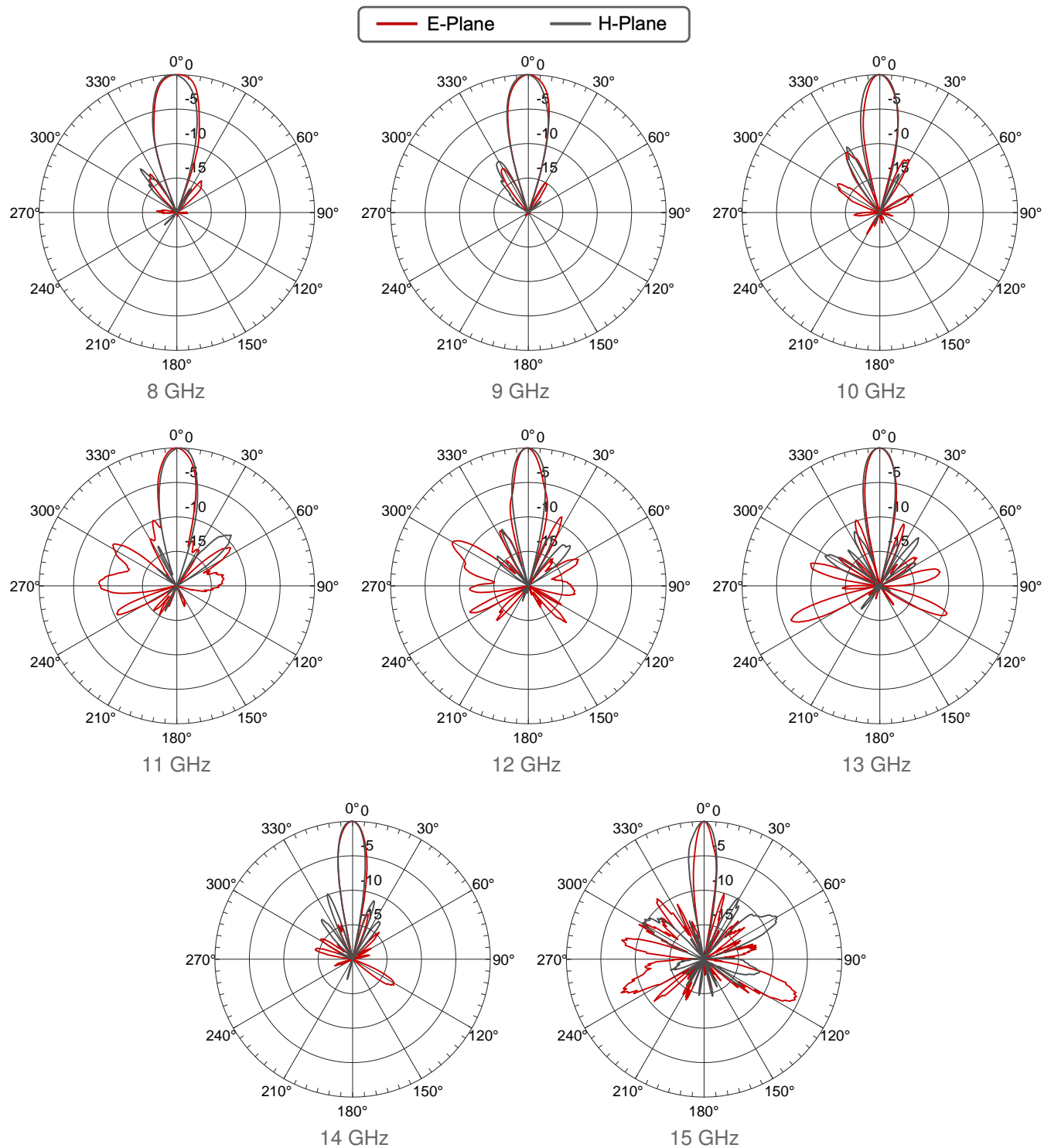


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TYPICAL PERFORMANCE (CONT.)

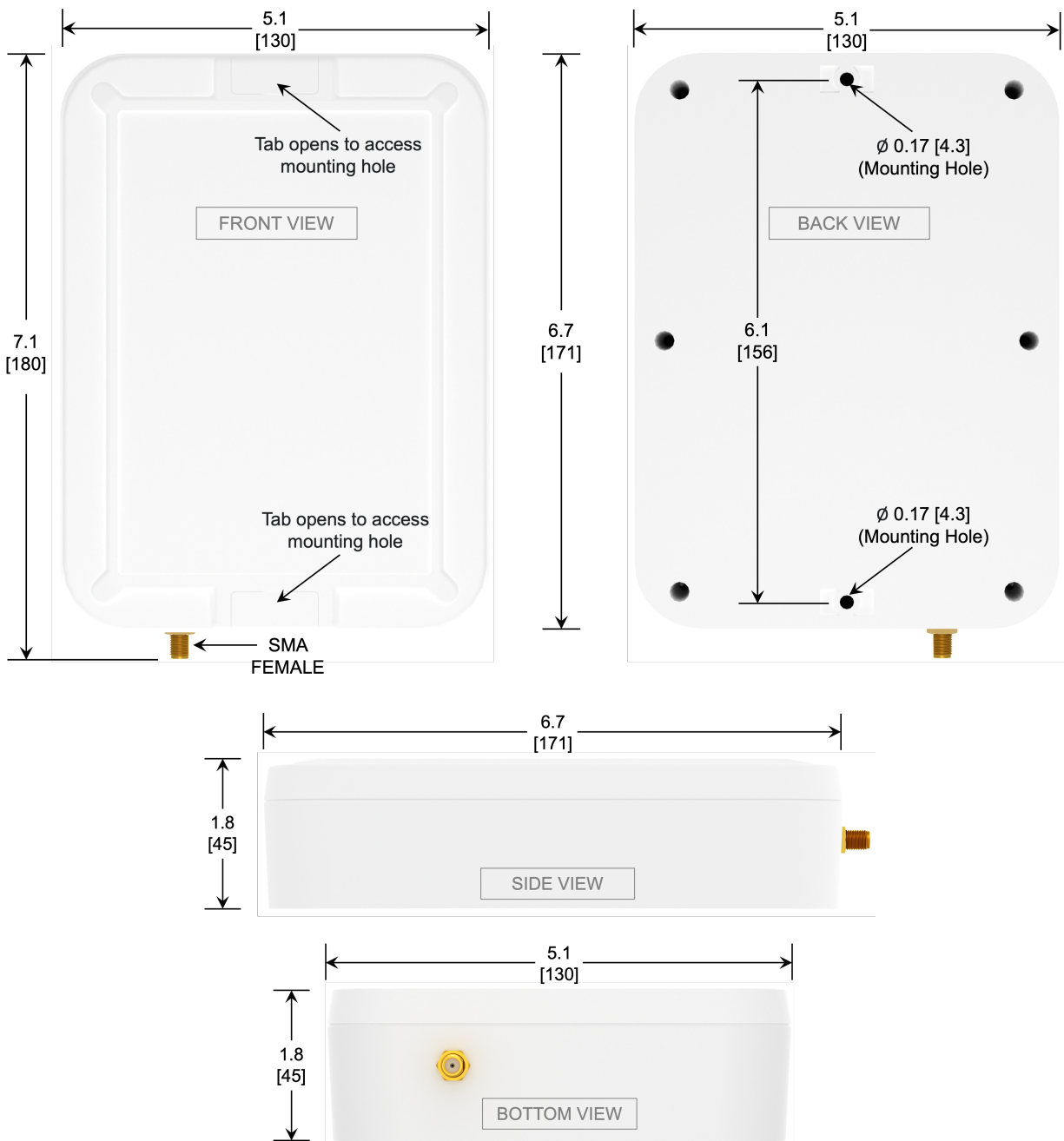


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CAD DRAWING



NOTES:

1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL
2. DIMENSIONS ARE IN INCHES [mm]
3. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME