

# MICROSTRIP PATCH ANTENNA ARRAY

8.0 GHz TO 15.0 GHz

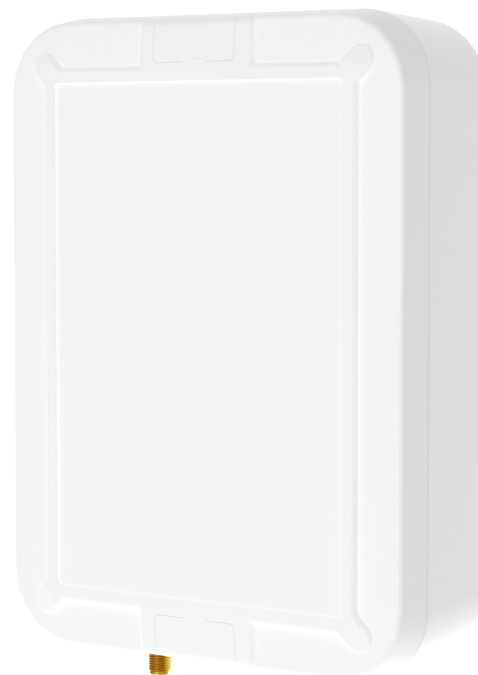
MPA8000

## 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 18 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]

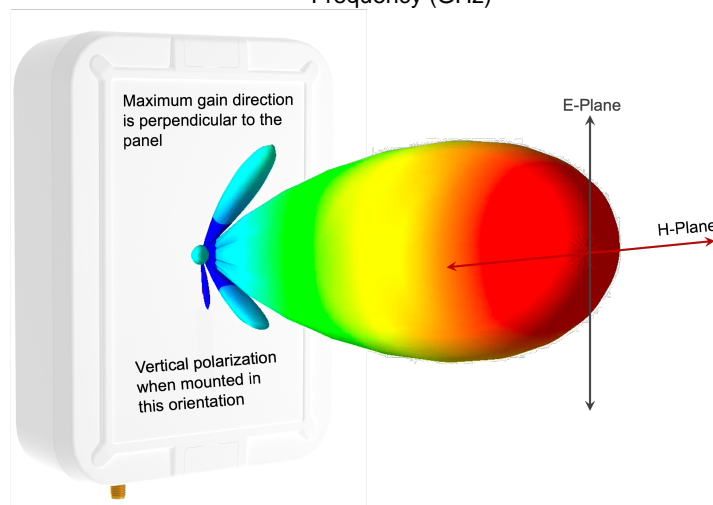
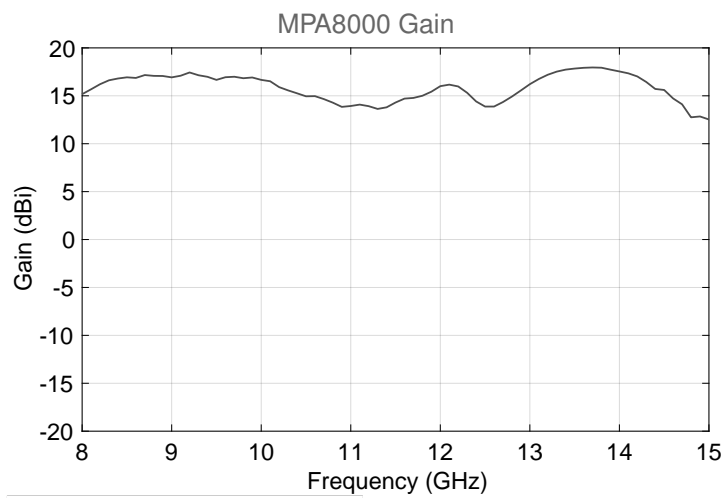
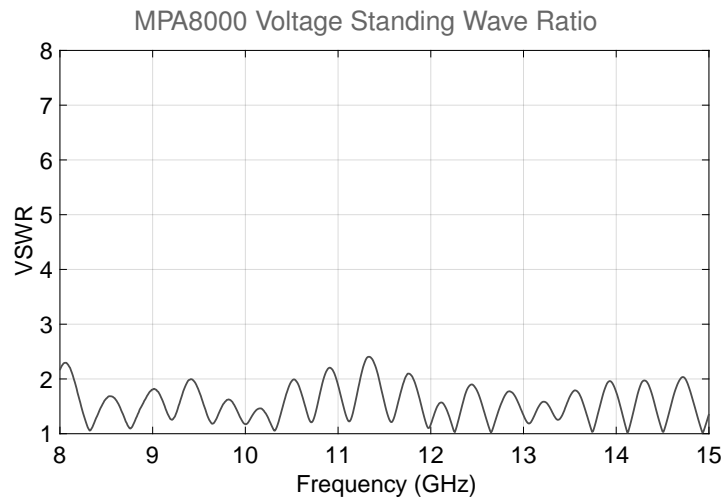


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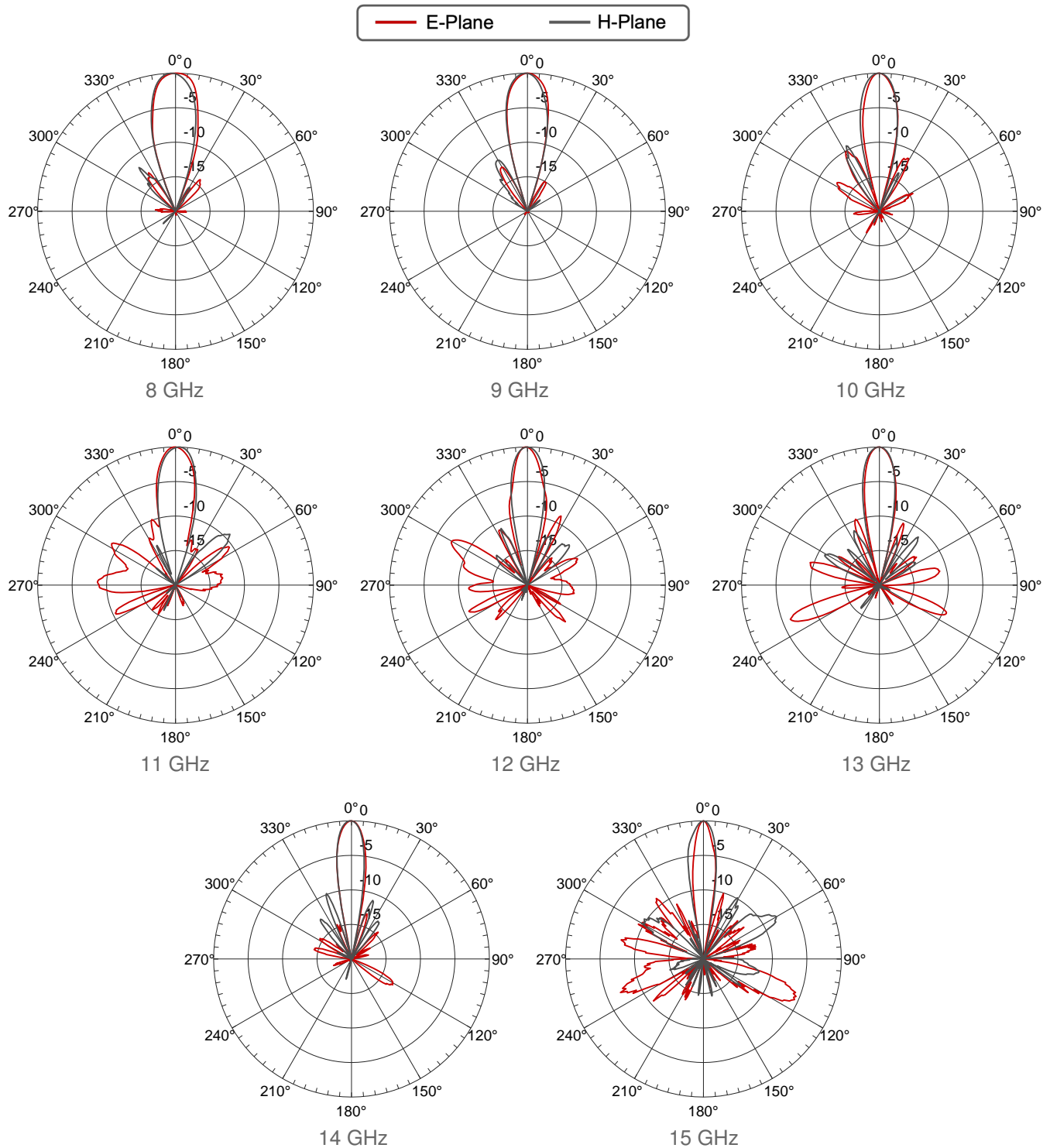
## PERFORMANCE SPECIFICATIONS

Parameter		Frequency	Min.	Typ.	Max.	Unit
VSWR		8.0 GHz – 15.0 GHz	–	1.6	3.0	–
Gain		8.0 GHz – 15.0 GHz	11.0	15.0	18.0	dBi
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			$\Omega$
Connector		–	SMA (female)			–

### TYPICAL PERFORMANCE



### TYPICAL PERFORMANCE (CONT.)

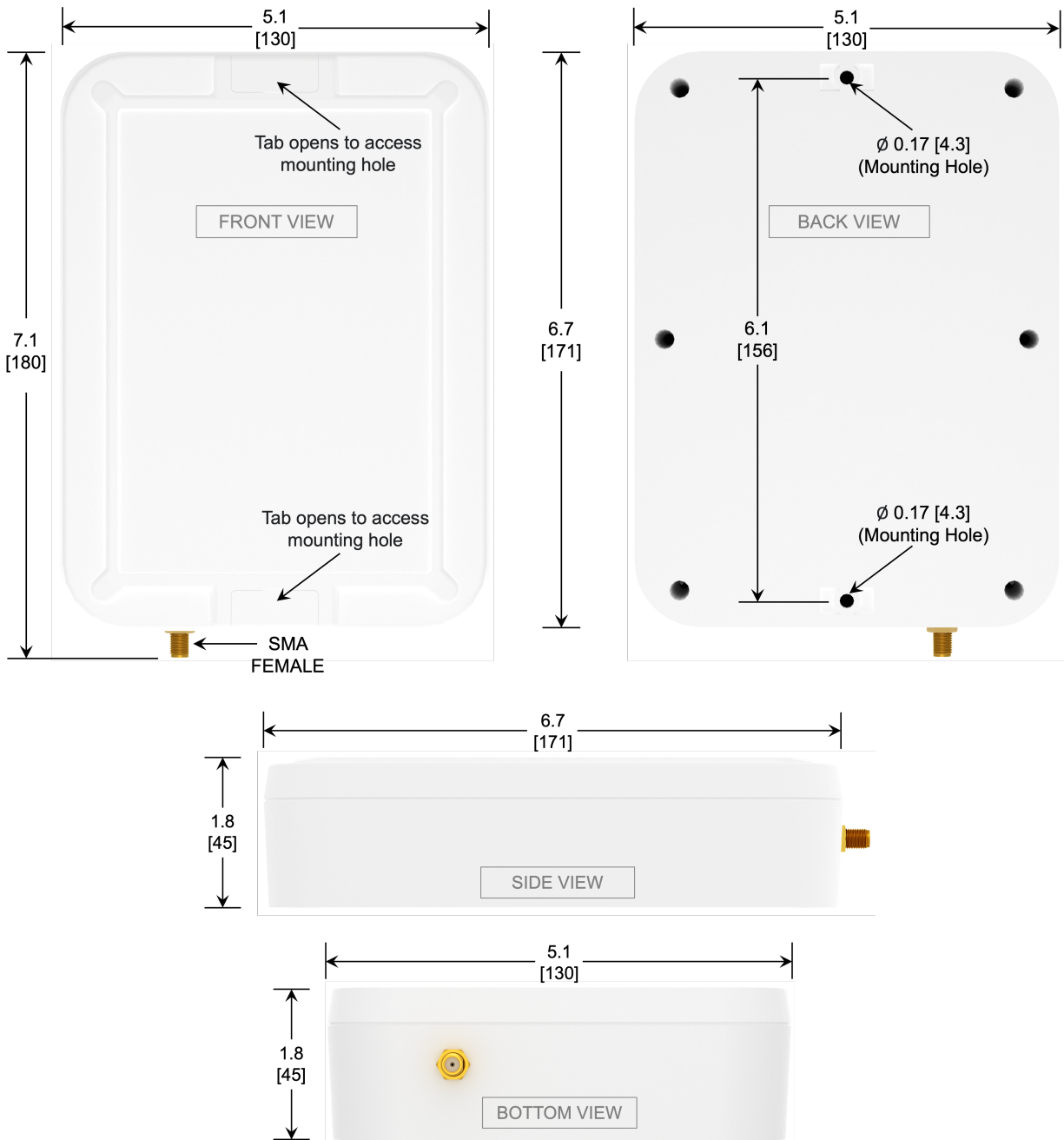


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### CAD DRAWING



#### 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