OMNIDIRECTIONAL FRP FIBERGLASS ANTENNA

1350–1450 MHz | Vertical Polarization | 360° Azimuth Coverage







A rugged outdoor omnidirectional antenna designed for wireless video and data-link reception in the 1350–1450 MHz band. The FRP radome provides weather-resistant mechanical protection, while the vertical-polarized omnidirectional radiation pattern supports coverage around the installation point.

Key Features

- 1350–1450 MHz operating band (100 MHz bandwidth)
- Omnidirectional horizontal coverage for 360° azimuth reception
- Nominal antenna gain: 10 dBi
- Vertical polarization and 50 Ω impedance

- VSWR ≤ 1.5 (design target)
- FRP fiberglass radome for outdoor installation
- Up to 100 W maximum input power
- Mounting compatibility with 40–50 mm diameter mast

Electrical & Mechanical Specifications

Parameter	Specification
Antenna type	Omnidirectional FRP fiberglass antenna
Frequency range	1350–1450 MHz
Bandwidth	100 MHz
Nominal gain	10 dBi
Horizontal coverage	360° (omnidirectional)
Vertical beamwidth	Approx. 16° (reference value; confirm on final tuned unit)
Polarization	Vertical
Voltage Standing Wave Ratio (VSWR)	≤ 1.5 (target across the specified band)
Input impedance	50 Ω
Maximum input power	100 W
Antenna length	To be finalized according to the 1350–1450 MHz tuning; approx. 1.2 m reference
Antenna weight	Approx. 1 kg reference; final value subject to configuration
Radome material	FRP (fiberglass)
Connector	N-type female (other connector options on request)
Mounting mast diameter	Ø 40–50 mm
Rated wind velocity	Up to 60 m/s

Typical Applications

- Ground-station antennas for wireless video and telemetry links
- Omnidirectional reception for mobile or fixed outdoor communication systems
- Wireless video transmitter and receiver installations
- Remote monitoring and data communication links

Installation Notes

- Install the antenna vertically and secure it to a suitable Ø 40–50 mm mast.
- Use a 50 Ω coaxial cable and connector system compatible with the radio equipment.
- Keep the antenna clear of nearby metal structures and other antennas where practical.
- For best system performance, verify antenna VSWR over the complete 1350–1450 MHz band after installation.