

DIGITAL BROADCAST

FM Antennas



There are many types of antennas in the market: directional, omnidirectional, dipoles, yagi, logarithmic... in this jungle it is not easy to decide which is the most suitable for your station!

Depending on the customer request, it is possible to define which is the ideal solution and to customize the pattern in order to meet all the authority indications!

Let's see the main characteristics of DB antennas for FM transmission.







- ✓ The P1 Vertical Polarization Dipole Antenna series is designed for FM Broadcast Band (87,5–108 MHz).
- $\checkmark$  The radiation pattern is omnidirectional.
- Suitable for single channel or broadband operations with multichannel combiners.
- $\checkmark$  Easy installation (the antenna is sent already mounted, it simply must be connected to the pole with the supplied brackets).
- ✓ Available with following connectors: N (max 600W), DIN 7/16 (max 1400W), EIA 7/8 (max 3500W).
- ✓ Gain: 2.15 dBd.





# FM dipoles – P1 antennas







#### Horizontal pattern







- ✓ The OCS/WB Circular Polarization Antenna series is designed for FM Broadcast Band (87,5–108 MHz).
- ✓ The radiation pattern is omnidirectional and the polarization is circular.
- Suitable for single channel or broadband operations with multichannel combiners.
- To facilitate the transport of this model of antenna, the elements are removed from the balun.
- This antenna is particularly suitable for city installations where multiple reflections (multipath) are a problem and circular polarization it drastically reduces the negative effects.
- ✓ Available with following connectors: N (max 600W), DIN 7/16 (max 1400W), EIA 7/8 (max 3500W).
- ✓ Gain: -1.5 dBd.

# FM circular polarization – OCS/WB antennas







# FM circular polarization – OCS/WB antennas





#### Horizontal pattern







- ✓ The P3 Vertical Polarization Yagi Antenna series is designed for FM Broadcast Band (87,5 –108 MHz).
- ✓ The radiation pattern is directional. It is possible to combine more antennas to create the pattern that is requested by the customer.
- Suitable for single channel or broadband operations with multichannel combiners.
- Easy installation (the antenna is sent already mounted, it simply has to be connected to the pole with the supplied brackets).
- ✓ Available with following connectors: N (max 600W), DIN 7/16 (max 1400W), EIA 7/8 (max 3500W).
- ✓ Gain: 5 dBd





# FM directional polarization – P3 yagi antennas





Horizontal pattern







- ✓ The APFM/DD Vertical Polarization Double Dipole Panel Antenna series is designed for FM Broadcast Band (87,5–108 MHz).
- $\checkmark$  The radiation pattern is directional. It is possible to combine more antennas to create the pattern that is requested by the customer.
- Suitable for single channel or broadband operations with multichannel combiners.
- $\checkmark$  To facilitate the transport of this model of antenna, the reflector is splitted in two parts.
- ✓ Available with following connectors: DIN 7/16 (max 1400W), EIA 7/8 (max 3500W).
- ✓ Gain: 7.5 dBd.

### FM directional polarization – APFM/DD panel antennas





## FM directional polarization – APFM/DD panel antennas







#### Horizontal pattern







## Coverage simulation

DB offers a coverage simulation study to its customers for defining the best configuration to use.

With the GPS coordinates of the station, we can check the estimated coverage of the antenna system you would like to install or we can define which is the more convenient solution based on your requests.

A tailor-made antenna system realized for your station!







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### www.dbbroadcast.com



www.screen.it