



DCPC

- Broadband Coverage with low VSWR across the full spectrum
- High Power Handling up to 10 kW per panel
- Delivers uniform circular polarization across the full FM band for consistent signal quality and coverage.
- Low Wind Loading
- Weather-Resistant Radome
- Long-term durability

The DCPC panel antenna delivers excellent broadband impedance and pattern stability, making it a practical and reliable alternative to complicated and expensive master FM antennas. The DCPC antenna combines rugged power handling with broadband operation, making it an ideal choice for high-power broadcasters, multi-tenant facilities, and transmission environments where uptime, reliability, and spectral purity are critical. The antenna is designed for face mounting one, two, or three panels per layer, around a triangular tower structure. Up to 12 layers can be stacked, depending on the gain desired.

Power Handling & Multi-Station Operation

A key highlight of the DCPC Broadband Panel Antenna is its high-power handling capability, supporting input levels of up to 10 kW. This is made possible using a single, large 4-inch balun tube, which replaces older design’s multiple small baluns and fragile feed straps. This not only increases the power threshold but also significantly improves mechanical and electrical reliability under continuous operation.

Polarization Ratio

The DCPC Broadband FM Panel Antenna is engineered to achieve excellent circular polarization performance across the entire FM band (88–108 MHz). At the design center frequency of 98 MHz, the differential dipole geometry ensures equal horizontal and vertical field components, resulting in optimized polarization balance.

Reliability and Cost

Reliability is a cornerstone of the DCPC Broadband FM Panel Antenna’s design philosophy. By eliminating historically failure-prone and costly components such as feed straps and power dividers, hybrids and less feed system, the DCPC achieves a substantial improvement in system integrity and long-term durability.

General Specifications

Polarization	Circular
VSWR	<1.15:1 Full band (88 to 108 MHz)
Power	10 kW per panel
Input	1 5/8" on bay. 3 1/8", 4 1/16" or 6 1/8" on array
Weight	300lbs per panel
Projected Area	19.75 ft²