

# FM System Calculator

## Options

Solve For:

☒ TPO

☐ ERP

Antenna input:

☒ End fed

☐ Center Fed

Edit Antenna  
Database

*Transmission Line FM Mid-  
Band Average Power Rating is  
16.4kW*

## User Input

ERP: .099 kW

Frequency: 105.7 MHz

Center of Radiation (COR) - AGL: 328 ft 100.0 m

1 Bay / Generic / Full-Wave Spacing Antenna

Additional Losses: 0 dB

Distance, Transmitter to Tower: 40 ft 12.2 m

Andrew LDF7-50A, 1-5/8" Foam Heliax Trans. Line

## Calculated Results

Antenna Power Gain 0.4611

Antenna Field Gain .679

Ant. FI @ 1 mi/1kW 93.436 mV/m

Antenna Input Power .215 kW

Line Attenuation/100 ft .2146 dB

Power Loss in Coax .043 kW 83.4 % Eff

TPO .258 KW

Tx Line Length 368 ft (112.2 m)

Minimum Tower Aperture 11 ft (3.4 m)

Top Bay Elevation - AGL 328 ft (100.1 m)

Antenna Length 1 ft (0.2 m)

Bottom of Antenna - AGL 328 ft (99.9 m)

This Software is Provided for  
Planning Purposes Only