

KBGT Antenna System

Item	Description	Attenuation (dB)	Total Attenuation (dB)
AND-87R	1 5/8" Gas Pass EIA Flange	0.05	0.05
AND-HJ750A	1 5/8" Air Dielectric Heliax (360')	0.19575/100'	0.705
AND-87G	1 5/8" Gas Block EIA Flange	0.05	0.05
MYA-201064	1 5/8" to 7/8" Tapered Reducer	0.05	0.05
AND-AL5E78PS	7/8" EIA Flange	0.05	0.05
AND-AVA550	7/8" Foam Dielectric Heliax (15')	0.342/100'	0.0513
AND-AL5E78PS	7/8" EIA Flange	0.05	0.05
Total Antenna System Loss (dB)			1.0063

Options

Solve For: ☒ TPO ☐ ERP

Antenna input: ☐ End fed ☒ Center Fed

Edit Antenna Database

Transmission Line FM Mid-Band Average Power Rating is 16.5kW

User Input

ERP: kW

Frequency: MHz

Center of Radiation (COR) - AGL: ft m

Antenna

Additional Losses: dB

Distance, Transmitter to Tower: ft m

Trans. Line

Calculated Results

Antenna Power Gain	3.31	Tx Line Length	372 ft (113.4 m)
Antenna Field Gain	1.8193	Minimum Tower Aperture	42 ft (12.8 m)
Ant. FI @ 1 mi./1kW	250.341 mV/m	Top Bay Elevation - AGL	336 ft (102.4 m)
Antenna Input Power	2.175 kW	Antenna Length	32 ft (9.6 m)
Line Attenuation/100 ft	.1956 dB	Bottom of Antenna - AGL	304 ft (92.7 m)
Power Loss in Coax	.568 kW	79.3 % Eff	
TPO	2.743 kW		

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