

KAKS (FM) Transmitter Power Output Calculation
99.5 MHz – 3.6 KW – 522 M AMSL
Goshen, Arkansas
June 2022

Transmitter Power Output Calculation

Given:

ERP	3.6 KW
Antenna Gain	1.878 (multiplier)
SWR FMEC/3-PLUS-HWS-DA	
Transmission Line Efficiency	80.32%

3.6 KW ERP divided by the antenna gain of 1.878 = an antenna input of 1.9169 KW

1.9169 KW divided by the transmission line efficiency of 80.32% = 2.3865 KW TPO

Per Section 73.212(a) of the Commission's rules, 2.3865 rounds to 2.4 KW Transmitter Power Output.

Bromo Communications, Inc.