

Transmitter Power Output Calculation

DESCRIPTION: TRANSMITTER POWER OUTPUT

AUTHORIZED ERP: 26,500 WATTS

DIELECTRIC DCRU12DC50T075 ANTENNA GAIN: 3.48

66' 1-5/8 INCH AIR COAX (HCA158-50) EFFICIENCY: 0.971

160' 6-1/8 INCH RIGID TRANSMISSION LINE EFFICIENCY: .983

10' 1-5/8 INCH RIGID TRANSMISSION LINE EFFICIENCY: .996

DIELECTRIC COMBINER EFFICIENCY: .891

MYAT 201-180-1 SWITCH EFFICIENCY: .999

TPO: 8998.9396 WATTS

CONFIRMATION: $8998.9396 \times 3.48 \times .971 \times .983 \times .996 \times .891 \times .999 = 26,499.997$ WATTS

NOTE: TRANSMITTER POWER OUTPUT FIGURE SHOWN AS 9.000KW DUE TO ROUNDING AND RESOLUTION OF THE FORM.

9,000 WATTS TPO = 26,503.12 WATTS ERP = 100.01%