

TPO Calculation WPKA-LP (ERP of 67 watts)

TRANSMISSION EFFICIENCY

ANTENNA GAIN: .95

LOSS PER CONNECTOR: .49DB x 10 = 4.90

LOSS IN POWER DIVIDER: .62DB

LINE LOSS: 1.2

POLYPHASER: .2

TOTAL DB LOSS 6.92db

THE FOLLOWING CALCULATION WAS USED IN DETERMINING TOTAL TPO

$(4.96\text{DB}/10 = .692)$

$(\text{INVERSE LOG OF } .692 = 4.92)$

$\text{ERP} = 67 \text{ WATTS} / (\text{ANTENNA GAIN } (.95) = 63.65 \text{ WATTS} * 4.92) = 313.16 \text{ WATTS}$

TPO ROUNDED OFF TO 313 WATTS