

**WVPY-DT Channel 21 Power Calculations****Signal Knob - WVPY-1**

	<u>TX Line Length</u>	<u>TX loss</u> dB	<u>Watts</u>	<u>dB</u>	
Maximum Average ERP			100000.00	20.000 dBk	
Transmission Line Loss Andrew HJ7-50A	136.5 Ft	0.662025		0.662 dB	
Antenna: RFS PHP24C, Gain 32.1, Major lobe 0 degrees				-15.100 dB	
<b>Total Power Output to Transmission Line</b>			<b>3599.15</b>	<b>5.562 dBk</b>	<b>65.562 dBm</b>
Antenna input power			3090.30	4.900 dBk	64.900 dBm

**Fork Mountain - WVPY-4**

	<u>TX Line Length</u>	<u>TX loss</u>	<u>Watts</u>	<u>dB</u>	
Maximum Average ERP			500.00	-3.010 dBk	
Transmission Line Loss Andrew LDF5-50A	75 Ft	0.65025		0.650 dB	
Antenna: Scala CL-1469, Gain 6.31, Major lobe 75 degrees				-8.000 dB	
<b>Total Power Output to Transmission Line</b>			<b>92.04</b>	<b>-10.360 dBk</b>	<b>49.640 dBm</b>
Antenna input power			79.24	-11.010 dBk	48.990 dBm

**Big Mountain- WVPY-3**

	<u>TX Line Length</u>	<u>TX loss</u>	<u>Watts</u>	<u>dB</u>	
Maximum Average ERP			98.00	-10.088 dBk	
Transmission Line Loss Andrew LDF5-50A	220 Ft	1.9074		1.907 dB	
Antenna: Scala CL-1469, Gain 6.31, Major lobe 100 degrees				-8.000 dB	
<b>Total Power Output to Transmission Line</b>			<b>24.10</b>	<b>-16.180 dBk</b>	<b>43.820 dBm</b>
Antenna input power			15.53	-18.088 dBk	41.912 dBm

**Little North Mountain - WVPY-2**

	<u>TX Line Length</u>	<u>TX loss</u>	<u>Watts</u>	<u>dB</u>	
Maximum Average ERP			100.00	-10.000 dBk	
Transmission Line Loss Andrew LDF5-50A	140 Ft	1.2138		1.214 dB	
Antenna: Scala CL-1469, Gain 6.31, Major lobe 0 degrees				-8.000 dB	
<b>Total Power Output to Transmission Line</b>			<b>20.96</b>	<b>-16.786 dBk</b>	<b>43.214 dBm</b>
Antenna input power			15.85	-18.000 dBk	42.000 dBm

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