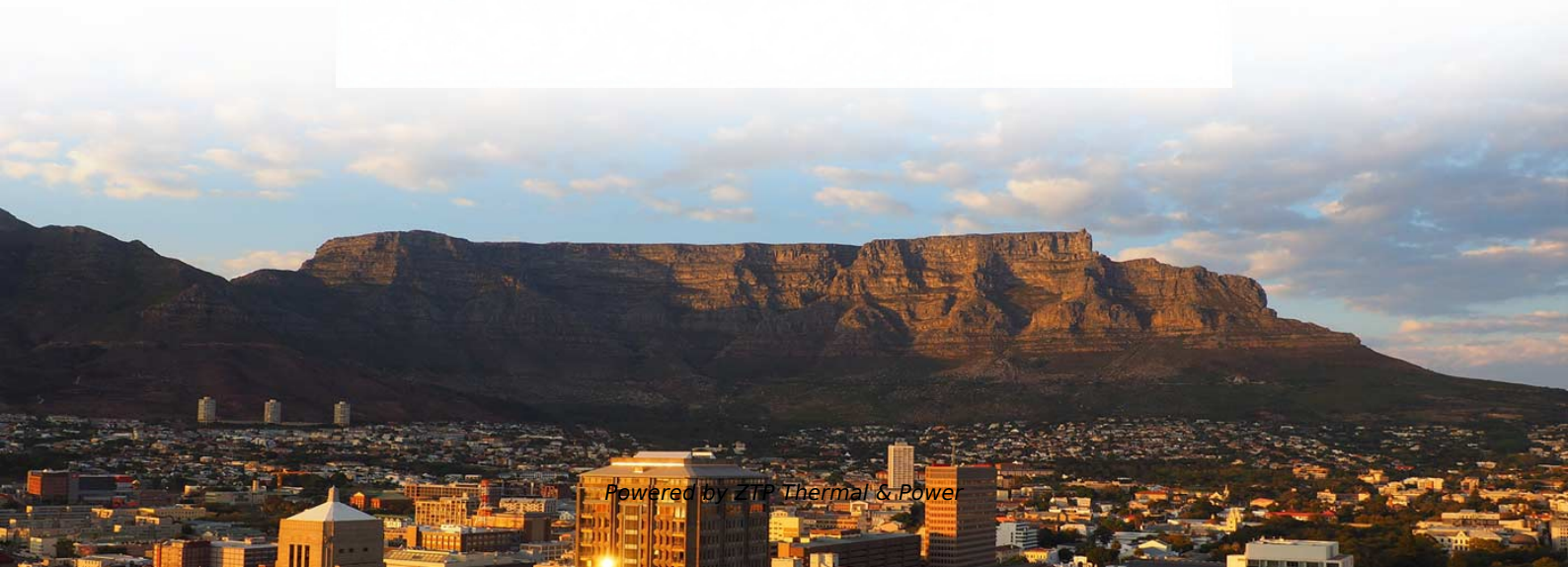


Performance Comparison of Energy-Saving Planar Waveguides vs Copper Cables





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Waveguides vs. Coaxial Cables The choice between using waveguides or "traditional" cables depends on the interplay of frequency and power. Generally, waveguides find practical

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he waveguide becomes smaller for higher frequencies. In fact, for high frequencies, the TE₀₁ mode has the smallest copper loss of the waveguide modes: It becomes the mode of choice (see Figure 20.2).

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An extension about a few tens of microns of the waveguide dimensions can alleviate this restraint. Thus, direct comparisons of dispersion and losses between different planar waveguides in



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