Clearspan®

Antenna Guide for POTS Replacement Solutions

Poynting A-OMNI-0600-V2-01 Omni Antenna

The below data reflects the effective system gain for a LMR-400 cable feeding the Poynting A-OMNI-0600-V2-01 omni antenna. The table also shows the combined cable loss with antenna gain for typical frequency bands.

Cable Length	Frequency (MHz)	LMR-400 Loss at Corresponding Cable Length	Antenna Gain (dBi)	Effective Gain at Radio
1 Foot	2400 (Wi-Fi / LTE)	0.068 dB	6 dBi	5.932 dBi
	3400-4200 (5G)	0.09 dB	6 dBi	5.91 dBi
50 Foot	2400 (Wi-Fi / LTE)	3.4 dB	6 dBi	2.6 dBi
	3400-4200 (5G)	4.5 dB	6 dBi	1.5 dBi
75 Foot	2400 (Wi-Fi / LTE)	5.1 dB	~6 dBi	≈ +0.9 dBi
	3400-4200 (5G)	6.8 dB	~6 dBi	≈ –0.8 dBi
100 Foot	2400 (Wi-Fi / LTE)	6.6 dB	~6 dBi	≈ +0.9 dBi
	3400-4200 (5G)	9 dB	~6 dBi	≈ –0.8 dBi

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Poynting A-PUCK-0002-v2-01 Mimo Antenna

The below data reflects the effective system gain for a LMR-400 cable feeding the Poynting A-PUCK-0002-v2-01 mimo antenna. The table also shows the combined cable loss with antenna gain for typical frequency bands.

Cable Length	Frequency (MHz)	LMR-400 Loss at Corresponding Cable Length	Antenna Gain (dBi)	Effective Gain at Radio
1 Foot	2400 (Wi-Fi / LTE)	0.068 dB	3.5 dBi	3.432 dBi
	3400-4200 (5G)	0.09 dB	4 dBi	3.91 dBi
50 Foot	2400 (Wi-Fi / LTE)	3.4 dB	3.5 dBi	0.1 dBi
	3400-4200 (5G)	4.5 dB	4 dBi	–0.5 dBi

Performance Disclaimer: Performance metrics, benchmarks, and test results referenced in this document are based on internal testing, controlled environments, or selected customer use cases. Actual performance may vary depending on system configuration, hardware, software, network conditions, data volume, implementation methods, and other operational factors. Results are not guaranteed and may differ materially in real-world environments.