

ALLOY TECH ARTICLE

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Topic / Issue: Approximate Wireless Antenna Distances

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Approximate Maximum Distances for Alloy's Wireless Antennas Under Ideal Weather Conditions.

The approximate distances are calculated using Alloy's WDS2454AP Bridging Access Point.

The following table assumes that you are using the same length of RF cable and the same Antenna at both or all sites.

The table also assumes that you are not breaching the **Fresnel Zone** and that you have clear line of sight.

We also suggest the use of Alloy's **POE-5V21** Power Over Ethernet solution to shorten the RF cable length to maximise transmission distance.

Antenna	5m HDF-400 RF Cable	10m HDF-400 RF Cable	15m HDF-400 RF Cable	20m HDF-400 RF Cable	25m HDF-400 RF Cable	30m HDF-400 RF Cable
S1213	35Km	26Km	21Km	16Km	12Km	9Km
ANTP25	17Km	13Km	10Km	8Km	6Km	5Km
ANT-YA20	5Km	4Km	3.3Km	2.5Km	2Km	1.5Km
GO-393	5Km	4Km	3.3Km	2.5Km	2Km	1.5Km
ANT-PA18	3.5Km	2.5Km	2Km	1.5Km	1.2Km	1Km
ANT-PA16	2Km	1.5Km	1.3Km	1Km	800m	600m
ANT-YA16	2Km	1.5Km	1.3Km	1Km	800m	600m
R8215	1.5Km	1.3Km	1Km	800m	600m	500m
ANT-YA15	1.5Km	1.3Km	1Km	800m	600m	500m
ANT-OD15	1.5Km	1.3Km	1Km	800m	600m	500m
PL14EI	1.3Km	1Km	800m	600m	500m	350m
R8213	1Km	800m	650m	500m	400m	300m
ANT-YC12	800m	650m	500m	400m	300m	250m
ANT-PA12	800m	650m	500m	400m	300m	250m
ANT-YC10	500m	400m	300m	250m	200m	150m

ANT-PA08	300m	250m	200m	150m	100m	N/A
ANT-OD08	300m	250m	200m	150m	100m	N/A

Summary:
(If required)