

Project Untitled 1

LINKPlanner PTP Proposal Report

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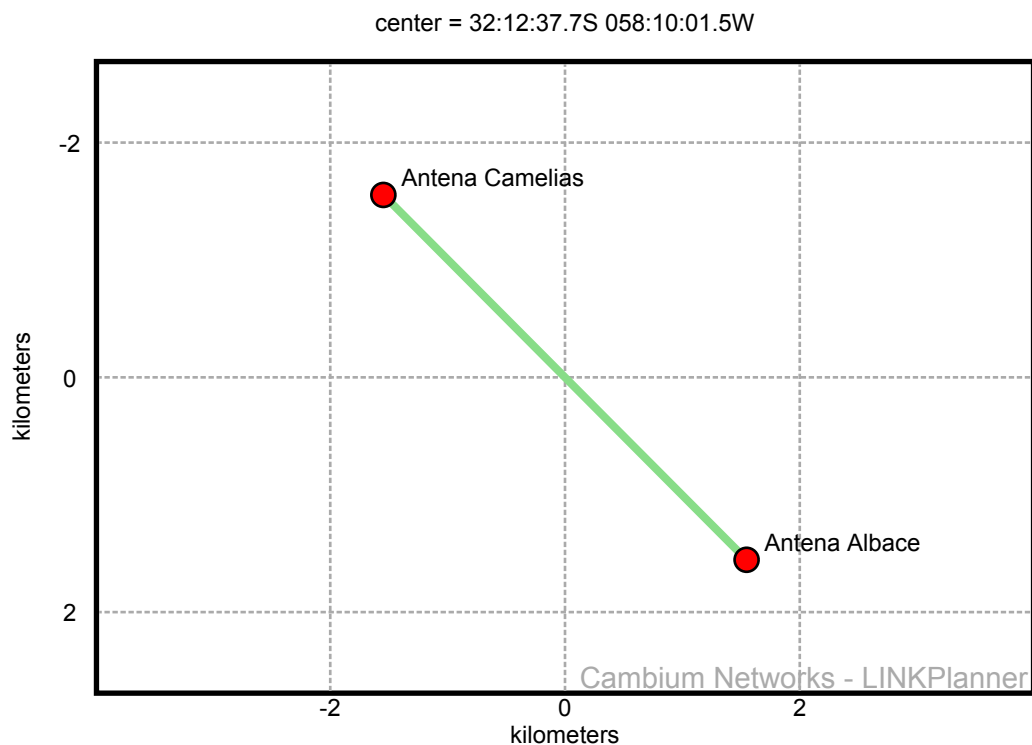


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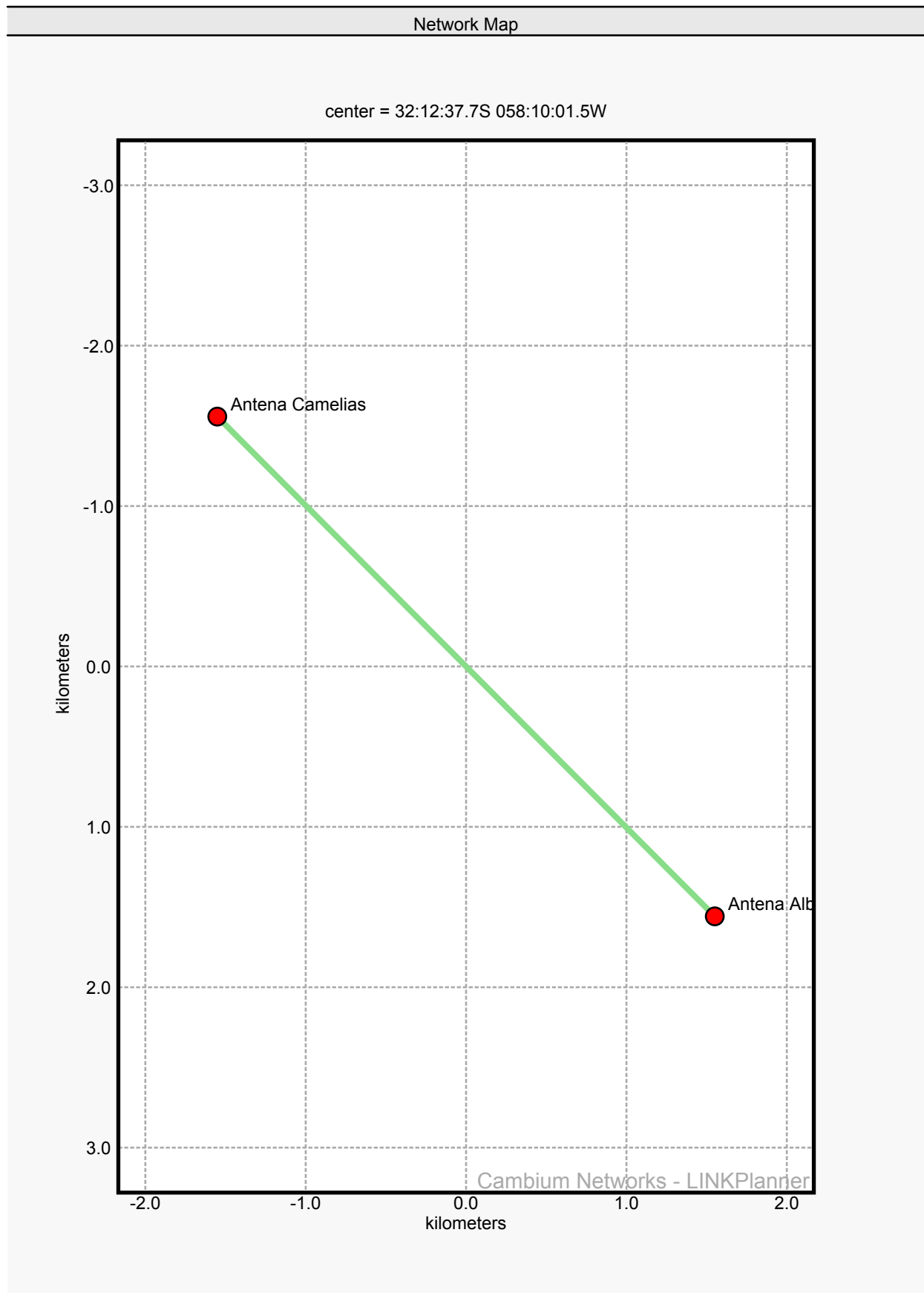
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1. Project Summary

Project: Untitled 1

Description: enlace pap camelias transporte 100 megas

General Information	
Customer Name	pablo
Company Name	conectarse srl
Address	
Phone	
Cell Phone	
Email	

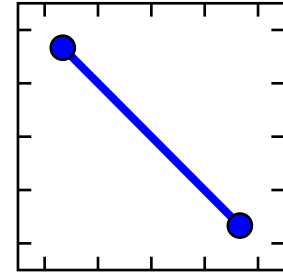


Link name	Product	Local antenna	Remote antenna	Max aggregate IP throughput (Mbps)
Antena Albace to Antena Camelias	ePMP 1000	Cambium Networks 5 GHz GbE Radio + Force 110 PTP	Cambium Networks 5 GHz Integrated + Reflector Dish C050900H008	168.00

Bill of Materials : PTP Network		
Part Number	Qty	Description
600SS	2	SURGE SUPPRESSOR
C050900B051	1	ePMP Force 110 PTP - High Performance PTP Radio (RoW) (no cord)
C050900C031	1	ePMP 1000: 5 GHz Integrated Radio (ROW) (no cord)
C050900H008	1	ePMP 1000: 4 Pack of ePMP Reflector Dishes. Qty is for individual reflector dish kits. Divide by 4 to calculate the pack qty.



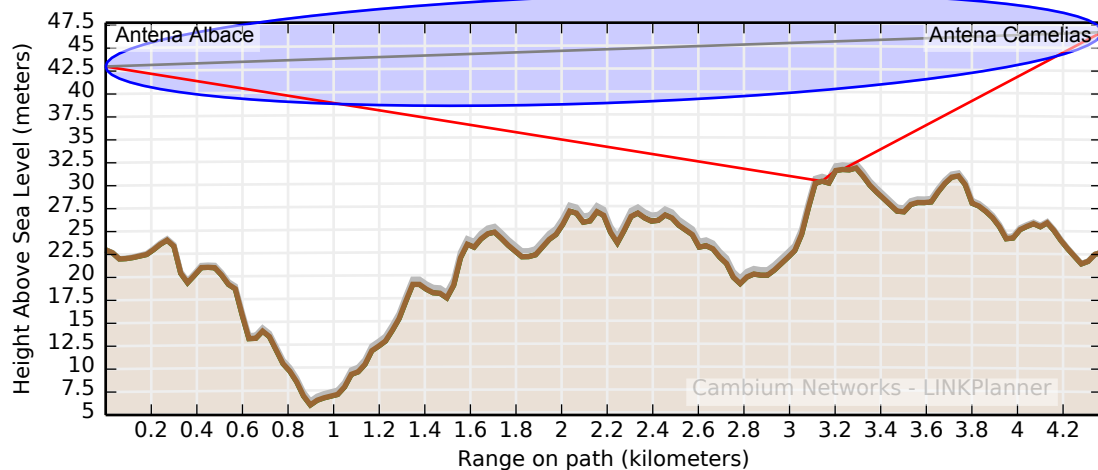
Antena Albace to Antena Camelias



Equipment: Cambium Networks ePMP 1000 Integrated

Cambium Networks 5 GHz GbE Radio + Force 110
PTP @ 20 m

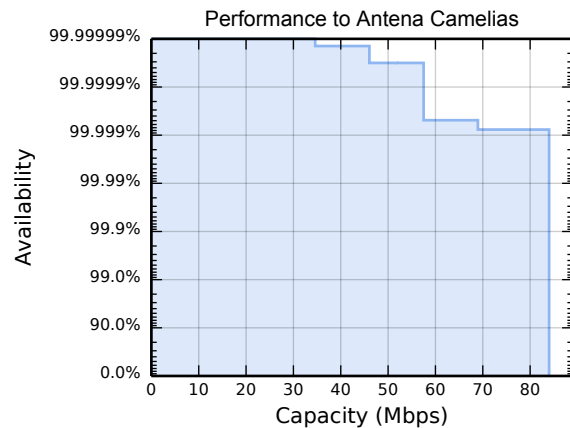
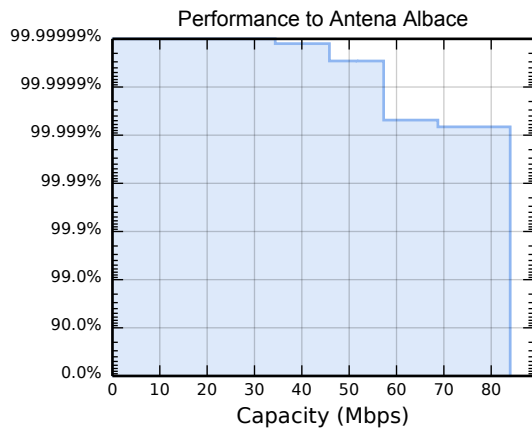
Cambium Networks 5 GHz Integrated + Reflector
Dish C050900H008 @ 24 m



	Performance to Antena Albace	Performance to Antena Camelias
Mean IP	84.0 Mbps	84.0 Mbps
IP Availability	99.9993 % for 80.0 Mbps	99.9992 % for 80.0 Mbps

Link Summary			
Link Length	4.370 km	System Gain Margin	33.73 dB
Band	5.8 GHz	Mean Aggregate Data Rate	168.0 Mbps
Regulation	Other	Annual Link Availability	100.0000 %
Modulation	Adaptive	Annual Link Unavailability	1 secs/year
Bandwidth	40 MHz	Frame Size	1518 Bytes
Total Path Loss	120.57 dB	Prediction Model	ITU-R
System Gain	154.30 dB		

Performance Charts



Climatic Factors, Losses and Standards

dN/dH not exceeded for 1% of time	-353.01 N units/km	Gaseous Absorption Loss	0.04 dB
Area roughness 110x110km	20.83 metre	Link Type	Line-of-Sight
Geoclimatic factor	4.03e-04	Excess Path Loss	0.00 dB
Fade Occurrence Factor (P0)	3.49e-04	Atmospheric Gasses	ITU-R P.676-7, ITU-R P.835-4
Path inclination	0.86 mr	Diffraction Loss	ITU-R P.526-10
Value of K Exceeded for 99.99% (ke)	0.40	Propagation	ITU-R P.530-12
Excess Path Loss at ke	0.00 dB	Rain Rate	ITU-R P.837-5
0.01% Rain rate	48.51 mm/hr	Refractivity Index	ITU-R P.453-9
Free Space Path Loss	120.53 dB		

Bill of Materials

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