

5Ghz Panel Antenna for ANT-14AD(14dBi) with WiFi6 Outdoor (OW-400 4N00) 1.6KM **Distance PtP Throughput Test Report.**







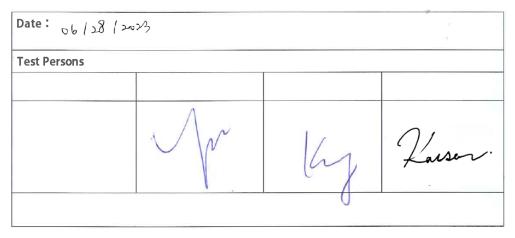
1. Test Product model.



2. Introduction

The purpose of this test is to determine the average throughput and signal stability of the external 5Ghz wide range single antenna (ANT14AD) with the OW-400 4N00 at a distance of 1600M. This test specifically measures point-to-point WDS connections set up with Cerio's CenOS 5.0 package. The test was carried out between two OW-400 4N00 devices operating according to the 802.11ax standard in a metropolitan office area.

3. Test Date and Personnel







4. Test Environment

Location A: XinDian Cerio office building top floor. Location B: Yonghe Xinbeihuanhe Expy at pedestrian bridge.

The distance from Location A to Location B is roughly 1600.88m, determined by Google Earth.







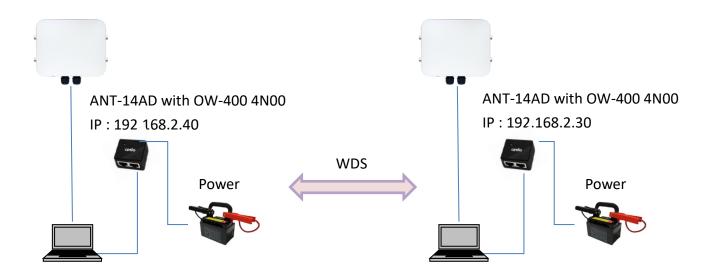


+(886) 2-8911-6160





5. System Network Configuration



6. OW-400-4N00 UI Screen

Location A: MAC Address and WDS

Radio	8c:4d:ea:06:2b:a3						
Radio	Radio 1 8c:4d:ea:06:2b:a4						
WDS Client Setup							
	Radio 0		Radio 1				
Enable	MAC Address	Enable	MAC Address				
			8c:4d:ea:06:2b:30				
Radio1 Client							
Radio1 Client	MAC Address	Rate(RX	/TX) RSSI				

Location B : MAC Address and WDS

MAC Address	
Radio 0	8c:4d:ea:06:2b:29
Radio 1	8c:4d:ea:06:2b:30



	Radio 0	Radio 1			
Enable	MAC Address	Enable	MAC Address		
			8c:4d:ea:06:2b:4a		
adio1 Client					
Caulor Chem					
adioi cilent	MAC Address	Rate(RX	(/TX) RSSI		

7. Throughput test

Successful connection screen of WDS used CH 64

CRIO OW-400-4N00 CenOS 5.0	🖀 System 👻 🛄 Wireless 👻	🖋 Utility 👻 🖬 Status 👻
WDS Status		
III Radio0 Client		
MAC Address	Rate(RX/TX)	RSSI
-	-	-
III Radio1 Client		
MAC Address	Rate(RX/TX)	RSSI
8c:4d:ea:06:2b:30	576Mb / 576Mb	29
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Band Mode	Channel	Throughput	Antenna
802.11ax	64	319.433	ANT-14AD
002.11dX	40	309.498	





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		2 No Group 3 No Group	Finished			5 : +6.845	88.494	27.009	114.943	59.665	7.734	
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Test Equipmen	t						
Notebook	HP 242 G1 x1	System OS	Windows 10 (x64)				
	Lenovo X230 x1						
Power (battery)	ALPHALINE MF85D23R x2						
Inverter	DC to AC 350W Inverter x2						
Tripod	2						
PoE Injector	Gigabit Injector (PoE-PE-60)W) x2					
RJ-45 Cables	Cat.5e x 4						
RF Cables	LLMR-NNP-1M x2						
Test product	1. External type : ANT-14	AD x2					
	2. eXtreme High Power V	ViFi6 Dual-Rad	lio external-ANT Outdoor				
	PoE Bridge/AP (OW-40	0 4N00) x2					
Test Software and	setting information						
Application tools	Chariot Version 6.7						
Running time	60 sec						
software	CenOS 5.0 Layer2 Softcore	Core					
	Firmware version : Pme-CF	PE-CERIO VO.0	1				
Operation mode	Using Access Point mode v	vith WDS func	tion				
Radio and	Radio 1 (5G) test channel:	36-64CH					
Channel							





8. On-site status

Location A: XinDian Cerio office building top floor. (新店 智鼎資訊 辦公室) **Location B** 10

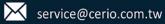






Location B: Yonghe Xinbeihuanhe Expy at pedestrian bridge.













Conclusion

To verify the research and development results of Cerio's latest wireless 14dbi 2x2 wide-range signal Panel MIMO wireless product antenna, and to enhance the reliability of the product, we conducted a long-distance throughput test on this new antenna with an outdoor wireless access point. This time we used an outdoor access model with an external antenna for a point-to-point test.

According to our test results using a 5Ghz external antenna (ANT-14AD) and OW-400 4N00 outdoor at 1600M, because of the hardware design of the ANT-14AD's wide-range signal characteristics, it is easy to fine-tune the horizontal or vertical angle and select the best channel setting After that, the best data transmission effect can be presented quickly. The long-distance connection transmission performance has achieved good performance.

The Cerio Outdoor Wireless Test has proven to be an invaluable reference tool for users planning to deploy our products in a variety of outdoor environments. Through this test, we have full confidence in our team's development and design capabilities.

We have extensive experience in creating quality wireless networking hardware and software products that consistently meet the needs of our customers and provide them with superior products.

