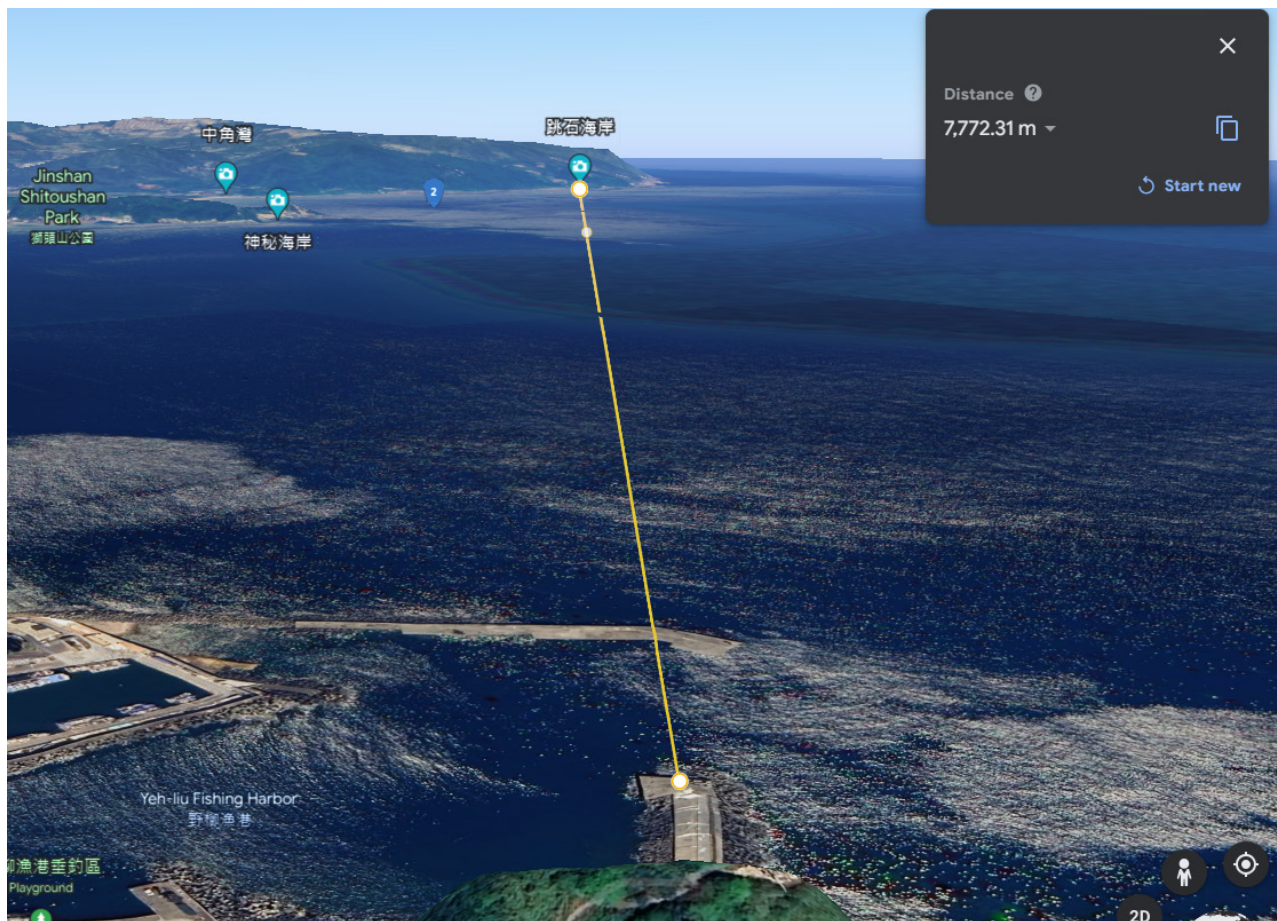


CERIO OW-400 2N18 Wifi Outdoor with build in 5Ghz 18dBi Antenna 7.7KM Distance PtP Throughput Test Report.



1. Test Product model.

eXtreme High Power WiFi6 Dual-Radio +18dBi Outdoor PoE Bridge/AP.



2. Introduction

The purpose of conducting this test was to determine the average throughput and signal stability of Cerio's OW-400 2N18 with build in 5Ghz 18dBi Antenna at a distance of 7.772.31Meter. The test specifically measured point-to-point WDS connections set through Cerio's CenOS 5.0 Software Bundle. The test was conducted between two units of OW-400-2N18 operating under 802.11ax standards.

3. Test Date and Personnel

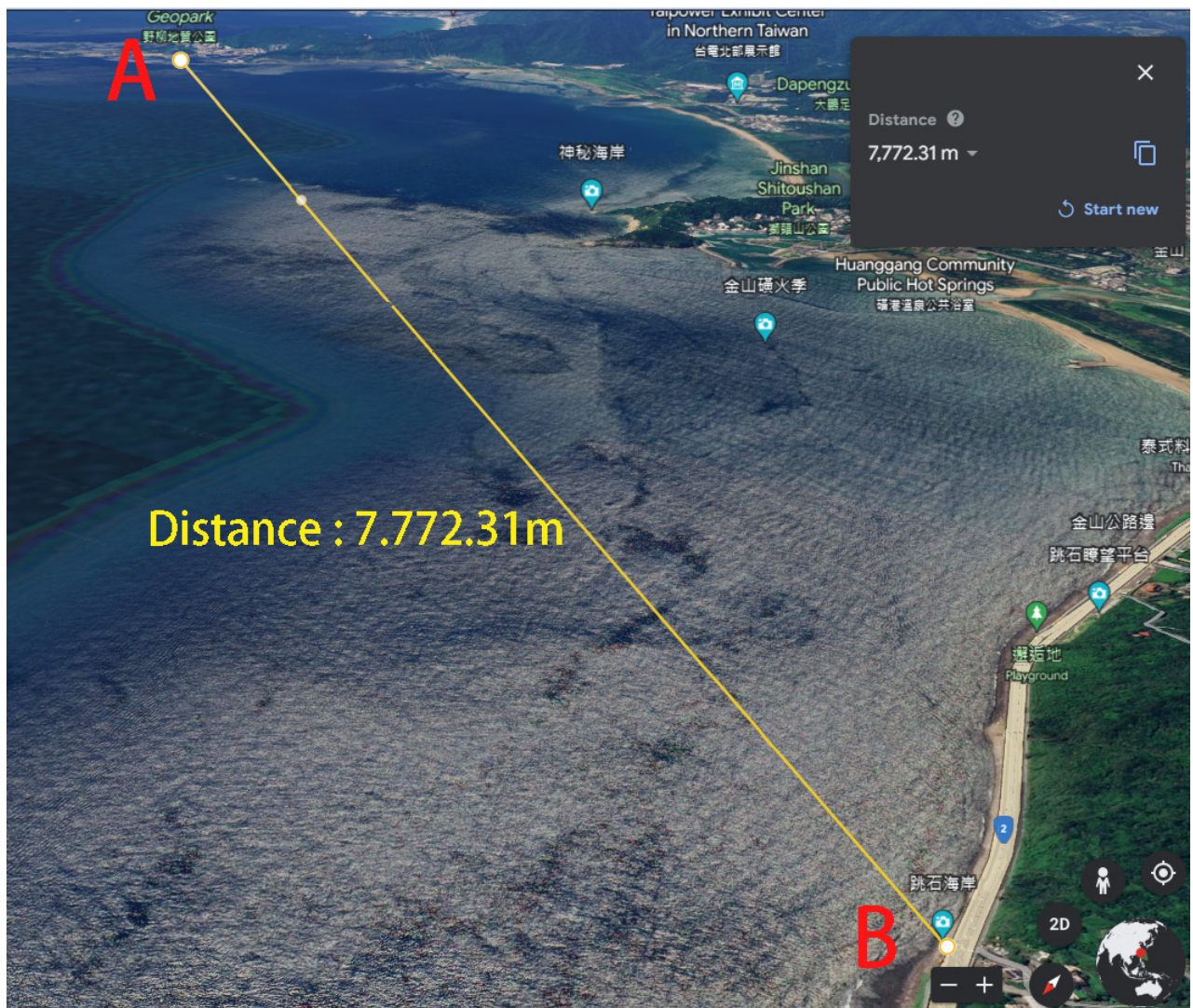
Date : 2023/9/25			
Test Persons :			
	mark	long	sun

4. Test Environment

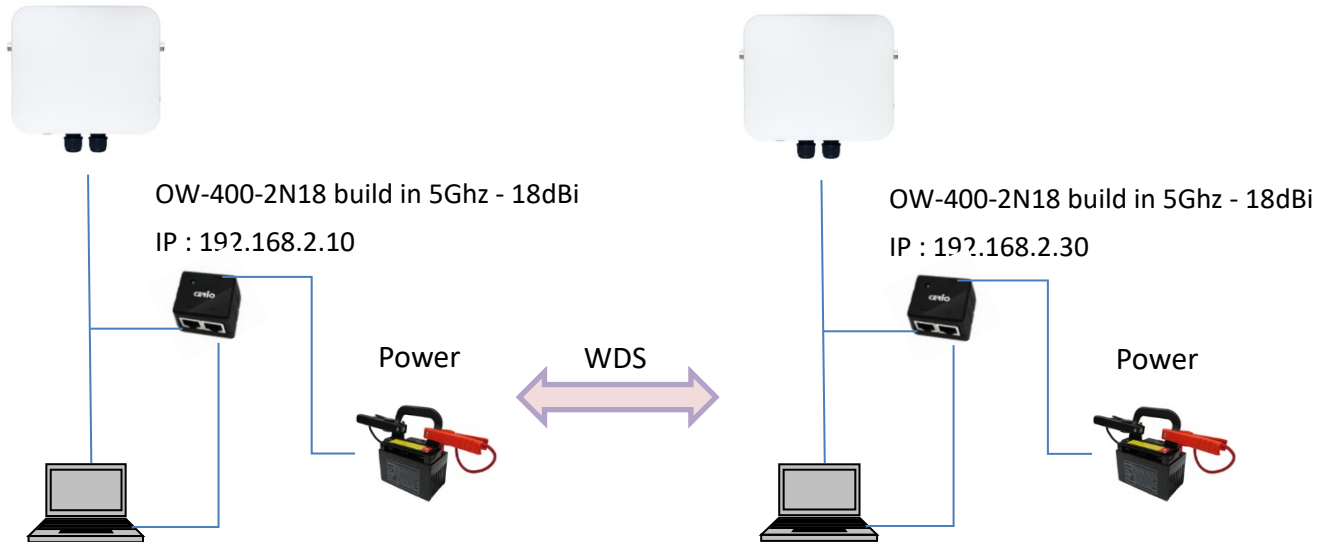
Location A : Across stony coast

Location B : Yeliu Fishing Port.

The distance from Location A to Location B is roughly 7.772.31m, determined by Google Earth.



5. Network Setup Configuration



6. OW-400-2N18 5G Radio 1 WDS Setting

Location A : AP_ IP 192.168.2.253

MAC Address

Radio 0

8c:4d:ea:06:2d:6f

Radio 1

8c:4d:ea:06:2d:70

WDS Client Setup

Radio 0		Radio 1	
Enable	MAC Address	Enable	MAC Address
<input type="checkbox"/>		<input checked="" type="checkbox"/>	8c:4d:ea:06:2d:74
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	

Location B : AP_ IP 192.168.2.254

MAC Address

Radio 0

8c:4d:ea:06:2d:73

Radio 1

8c:4d:ea:06:2d:74

WDS Client Setup

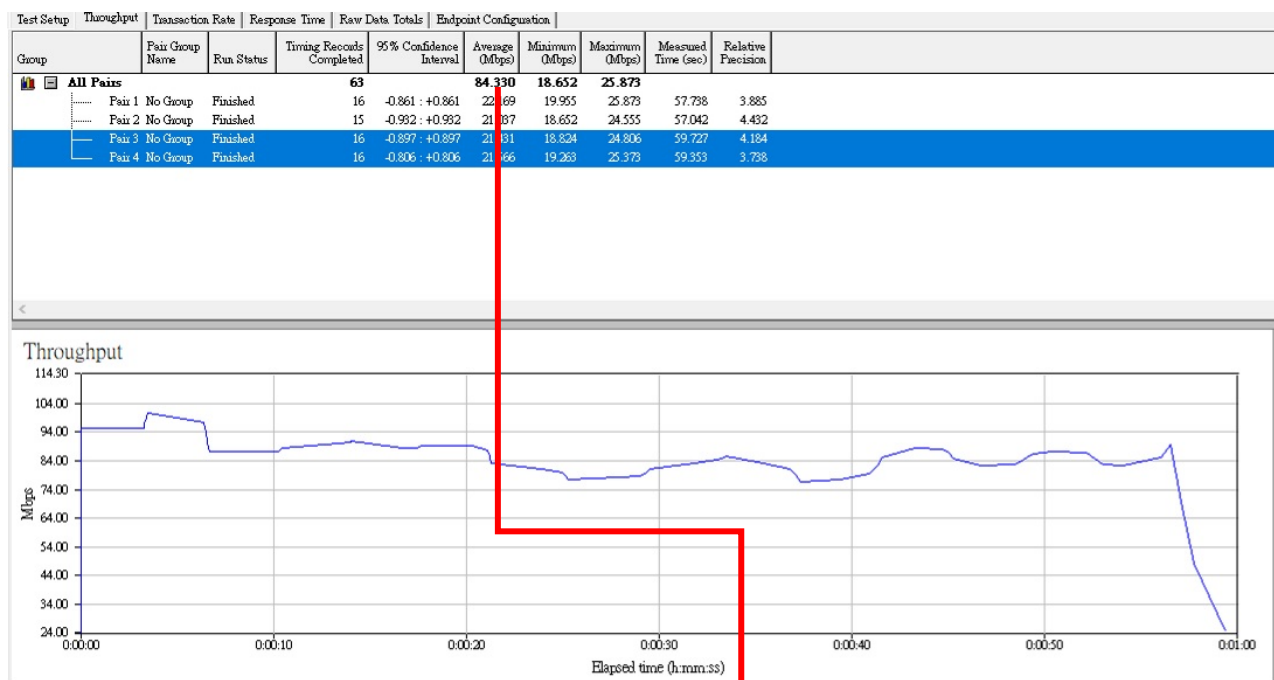
Radio 0		Radio 1	
Enable	MAC Address	Enable	MAC Address
<input type="checkbox"/>		<input checked="" type="checkbox"/>	8c:4d:ea:06:2d:70
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	



7. Throughput test

WDS used Channel 64

Band Mode	Channel	Throughput	Antenna
802.11ax	64	84	18dbi



Test Setup | Throughput | Transaction Rate | Response Time | Raw Data Totals | Endpoint Configuration

Group	Pair Group Name	Run Status	Timing Records Completed	95% Confidence Interval	Average (Mbps)	Minimum (Mbps)	Maximum (Mbps)	Measured Time (sec)	Relative Precision
All Pairs			63		84.330	18.652	25.873		
Pair 1	No Group	Finished	16	-0.861 : +0.861	22.169	19.955	25.873	57.738	3.885
Pair 2	No Group	Finished	15	-0.932 : +0.932	21.037	18.652	24.555	57.042	4.432
Pair 3	No Group	Finished	16	-0.897 : +0.897	21.431	18.824	24.806	59.727	4.184
Pair 4	No Group	Finished	16	-0.806 : +0.806	21.566	19.263	25.373	59.353	3.738

8. TEST Tools

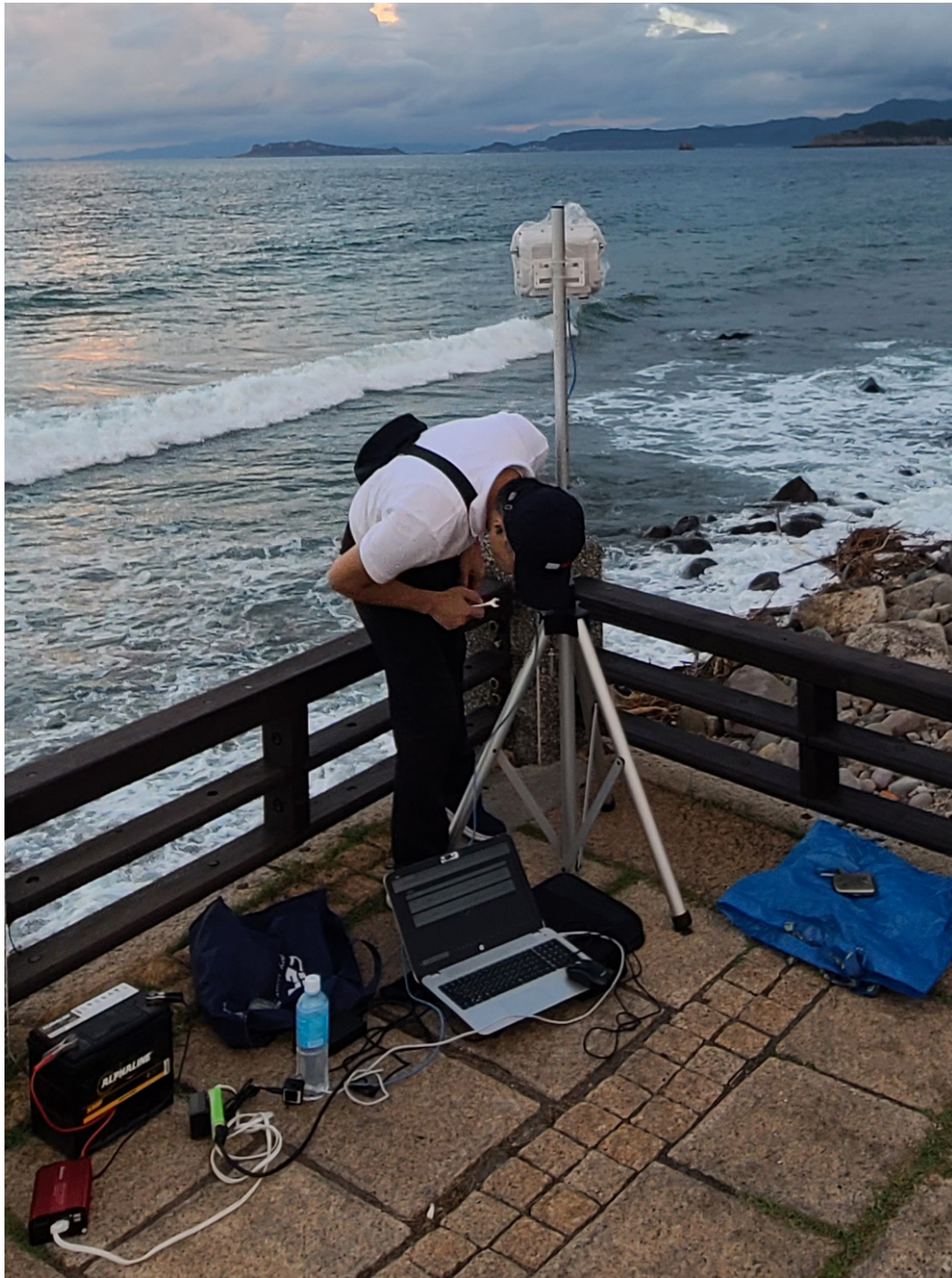
Test Equipment			
Notebook	HP 242 G1 x1 Lenovo X230 x1	System OS	Windows 10 (x64)
Power (battery)	ALPHALINE MF85D23R x2		
Inverter	DC to AC 350W Inverter x2		
Tripod	2		
PoE Injector	Gigabit Injector POE-PE03GE 30W x2		
RJ-45 Cables	Cat.5e x 4		
Antenna	Blind in 18dBi Antenna		
Test products	eXtreme High Power WiFi6 Dual-Radio +18dBi Outdoor PoE Bridge/AP (OW-400 2N18)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-CPE-CERIO V0.01		
Operation mode	Using Access Point mode with WDS function		
Radio and Channel	Radio 1 (5G) test channel: 64CH		



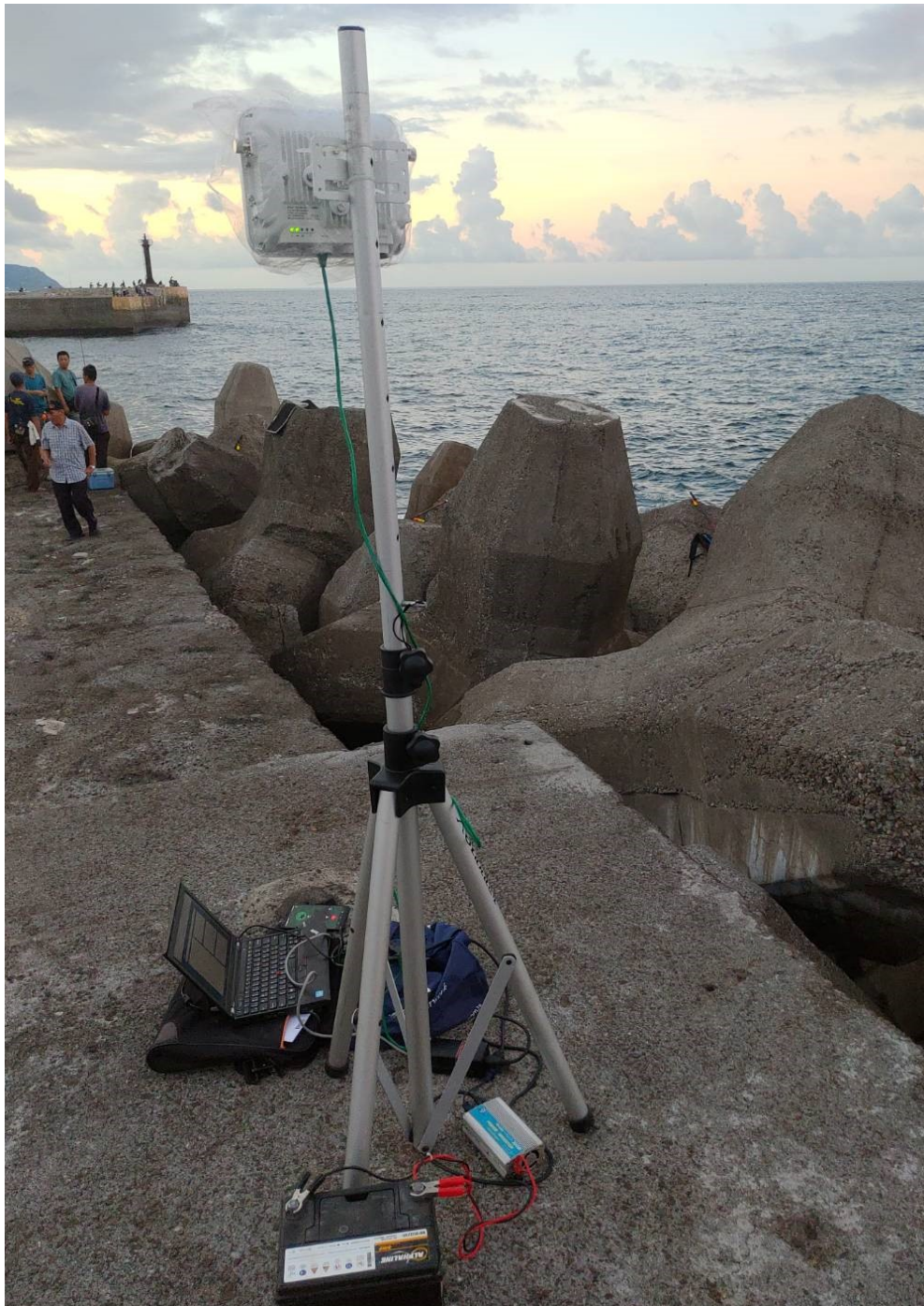
9. On-site status

Location A: Across stony coast





Location B: Yeliu Fishing Port





Conclusion

In order to verify our Cerio wireless product performance and instill consumer confidence, we conducted long distance throughput testing for our outdoor wireless access points. We conducted point-to-point testing using our Outdoor Access Point models with built-in dual-polarization directional antennas.

According to our OW-400 2N18 7.772.31Meter test results with built-in 5Ghz 18dBi antenna, we hope to provide customers with better transmission performance

The outdoor wireless testing proves to be a very valuable reference for users planning on deploying our products in a variety of outdoor environments. In term of this test, It will confident in our team's ability to develop and design.

Our extensive experience enables us to create premium wireless networking hardware and software products that consistently meet our customers' needs and deliver superior products to our customers.