

NEXUSTECH

NX1700

Outdoor Wi-Fi Access Point + Mesh

Made in Korea



Key features of Outdoor Wireless Access Points: **NX1700**

- Most advanced 9 x N-type RF ports, carrier-grade outdoor Wi-Fi AP
- Wireless AP + MESH All-in-one Type (stand-alone operation and MESH function)
- Multi-HOP Optimization (3 HOP)
- Providing Customized Solution, competitive price - 60% of global brand
- Weatherproof and temperature hardened.
- Compatible the open source Openwisp2 controller (without license requirements)
- Has 4 radios (802.11ac dual-band 2.4G, Two of 5G, wireless console)
- Higher radiated RF power, High-performance
- 1.7 Gbps (5 GHz) WLAN RF data rates with 4x4 wave 2 MU-MIMO

Why you have to choose NX1700?

Highest-Performing and designed for the harshest Outdoor Wireless AP

In the next few years, using Internet demand will grow rapidly. Installation outdoor Wi-Fi equipment is important to support travel industry and build smart cities. Outdoor Wi-Fi equipment can be installed in big area. The NX1700 outdoor access point is suitable for both public enterprise and carrier-class network operators looking to extend Wi-Fi coverage outdoors. It offers proactive and highest-performing outdoor AP and also supports the latest Wi-Fi standard, 802.11ac Wave 2, along with data connection speeds up to 1.7 Gbps. NX1700 AP supports 4x4 Multi-user, Multiple-Input and Multiple-Output (MU-MIMO) technology and 9 spatial streams (9SS) with Multi Hop (3-HOP) for optimum performance.

Our product of provided 1.7 Gbps was released in Korea at the First time.

The NX1700 outdoor Wi-Fi access point provides high quality of performance throughput over a larger area (distance between APs is 20Km) with more pervasive coverage. The recommended number of concurrent users is 512 per Unit based on average data usage with High Speed (up to 1.7Gbps) in the place where many users in close proximity generate RF interference that needs to be managed.

Here is our Major Markets of NX1700 as below:

* Enterprises, Military base, Hospital/Forest, Smart City-farm, Large Area, like industrial complex.

Special and Unique Benefits of NX1700

The NEXUSTECH NX1700 is integrated with 'Outdoor Wireless AP' and 'Mesh' **All-In-One** product.

And, NX1700 meets the customer's need of its product by providing **Customized-Service!**

One of the most differentiated Technology is using **Multi Hop Optimization**. To improve 3-HOP performance, we use 3 wireless channels(CH), processing by each processor to improve efficiency and Integrated type L2 switching for connecting three independent RF modules.

Second, The NX1700 **has 4 radios** (Wireless 1 -2.4G, Two of Wireless 2 5G, Wireless Console) more detailed information is below of the table.

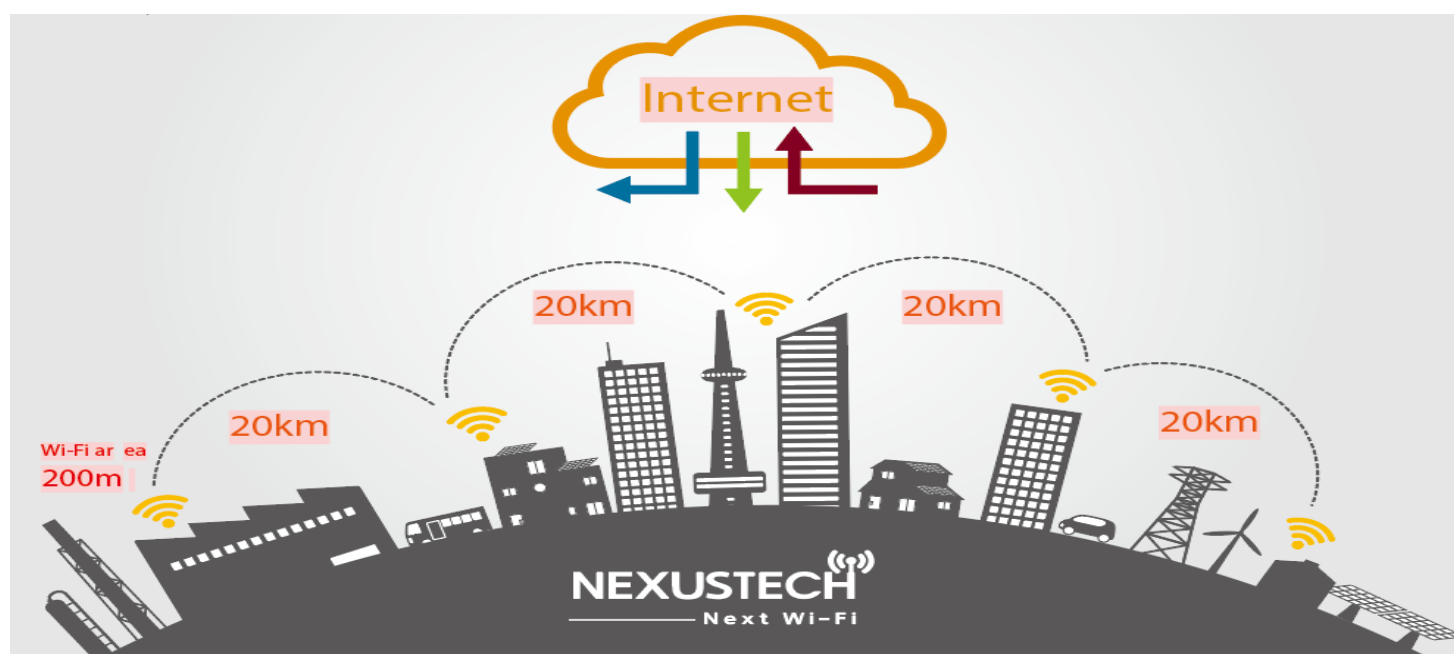
Third, The NX1700 uses open source firmware **Openwrt** which provides lots of capabilities found in high-end devices with more than 3000 application packages, So It is ideal platform to be IoT Gateway or for Smart City Wi-Fi infrastructure

Last is, **Competitive price** 60% of major global brand!

Item	Specification
<p>Part numbers</p>	<p>NEXUSTECH NX1700 (External Antenna, PoE Power Model)</p> <p>Customers are responsible for verifying approval for use in their individual countries.</p> <ul style="list-style-type: none"> - Not all models available for all regulatory domains. - Not all regulatory domains have been approved.
<p>802.11n capabilities</p>	<ul style="list-style-type: none"> - 2x2 MIMO for Radio 0 - Maximal ratio combining (MRC) - 802.11n and 802.11a/g - 20 and 40MHz channels - PHY data rates up to 300 Mbps (40 MHz with 5 GHz) - Packet aggregation: A-MPDU (Tx/Rx), A-MSDU (Tx/Rx)
<p>802.11ac Wave 2 capabilities</p>	<ul style="list-style-type: none"> - 4x4 MIMO for Radio 2 - Maximum Ratio Combining (MRC) - 802.11ac Beamforming - 20, 40, 80 and 80+80MHz channels - PHY data rates up to 1.7 Gbps (80 MHz with 5 GHz) - Packet aggregation: A-MPDU (Tx/Rx), A-MSDU (Tx/Rx)
<p>Radio Frequency</p>	<ul style="list-style-type: none"> - Wireless 1 (2.4G) : IEEE 802.11b/g 2x2 MIMO Maximum 300Mbps - Wireless 2 (5G) : IEEE 802.11ac/n 4x4 MIMO Maximum 1.7Gbps - Wireless 3 (5G) : IEEE 802.11ac/n 2x2 MIMO Maximum 867Mbps * Wireless Console : IEEE802.11bgn 1x1 (2.4GHz), Maximum 72Mbps

Item	Specification
Receive Sensitivity	<ul style="list-style-type: none"> - Wireless 1 (2.4G) : -95dBm @ MCS0, -74dBm @ MCS7 - Wireless 2 (5G) : -88dBm @ MCS0, -62dBm @ MCS9 - Wireless 3 (5G) : -90dBm @ MCS0, -72dBm @ MCS7
BandWidth	<ul style="list-style-type: none"> - 2400~2483.5MHz : 20/40MHz - 5150~5250, 5725~5825MHz : 20/40/80/80+80MHz
Tx Power	<ul style="list-style-type: none"> - Wireless 1 (2.4G) : 22dBm @ MCS0, 18dBm @ MCS7 - Wireless 2 (5G) : 26dBm @ MCS0, 23dBm @ MCS9 - Wireless 3 (5G) : 22dBm @ MCS0, 19dBm @ MCS7
Controller	- OpenWRT(<i>configurable and free without any license requirements</i>)
Modulation	- OFDM(BPSK, QPSK, 16QAM, 64QAM, 256QAM)
Antenna Port	<ul style="list-style-type: none"> - Wireless 1 (2.4G) : N-type X 2 - Wireless 2 (5G) : N-type X 4 - Wireless 3 (5G) : N-type X 2 * Wireless Console : N-type X 1 (internal antenna)

Note: The maximum power setting will vary by channel and according to individual country regulations.



Item	Specification
Interfaces	<ul style="list-style-type: none"> - 2 x LAN port 10/100/1000 BASE-T Ethernet (RJ-45) (one has PoE PD) - Management console port (RJ-45) - Six High Bright color LEDs Power, LAN1, LAN2, WiFi0, WiFi1, WiFi2 - Reset button (internal) - USB 3.0 port (<i>It allows expansion to include Lora, BLE, Zigbee, Thread, etc</i>)
CPU	<ul style="list-style-type: none"> - MIPS 1004Kc @880MHz 2C/4T (Dual Core/Quad Thread) 32KB I-Cache / 32KB D-Cache / 256KB L2 Cache w/ SMP with 256 Mbytes RAM (Flash memory capacity: 8MB)
Power	<ul style="list-style-type: none"> - 802.3af PoE (DC 48V / 0.32A) / AC adapter input : 100~230V * Option : PoE Injector
Security	<ul style="list-style-type: none"> - 802.11i (WPA1/2-PSK, WPA2-ENTERPRISE), 64/128bit WEP - 802.11e WMM (QoS support) / MAC Filtering
Management	<ul style="list-style-type: none"> - Telnet, WEB, SNMP, Find IP, Wired/Wireless Console
Environmental	<ul style="list-style-type: none"> - Operating temperature and Humidity: -20 to 70°C / 10% ~ 90% (Non-condensing) - Storage temperature and Humidity : -40 to 90°C / 5% ~ 95% (Non-condensing)
Environmental Ratings	IP67
Dimensions & Case Material	230 x 300 x 90 mm (W X H X D) Reinforced plastics (ABS, PC)
Weight	2.9Kg without Bracket
Compliance	<ul style="list-style-type: none"> - Korea : KC (Radio Approvals) - Vietnam: MIC / VNTA Type Approval Certificate (Radio Approvals) Security, Safety
Power Consumption	Under 10W
Configuration Options	Flexible deployment configurations include: <ul style="list-style-type: none"> - Standalone - Mesh - Point-to-point or point-to-multipoint campus bridge
Warranty	Hardware: 2 year limited warranty

Patents held and applied

Registration Patents

No	Patent registration name	Registration Number
01	Wi-Fi network access system	10-1781177
02	Temperature compensation of RF transceiver and linear gain controller	10-0592599
03	Gun management system with wireless repeater	10-1798037
04	Service method of mountain climbing course guide using mobile communication terminal	10-0714911
05	Resident Public information transmission service system using Wi-Fi and beacons	10-1802703
06	Automatic repeat request system and its method for multi-hop system in broadband wireless access communication network	10-0105521
07	Wireless network communication method and its system using direct links	10-0093666
08	Serving node decision method in a multi-hop wireless mobile communication system	10-0106196
09	Indirect signal removing system and its method in a wireless communication system	10-0024836
10	Signal relay method and its system in wireless communication system	10-0063749
11	Replay attacks preventing method in a wireless network environment	10-0051117
12	Method for gateway selecting to optimize network capacity gateway in wireless mesh networks	10-1421145
13	Apparatus and method for processing handover in a multi hop relay broadband wireless access communications system	10-0883790
14	System and method for transmitting and receiving signals in a communication system using a relay scheme	10-0975726
15	Routing method in wireless network and communication apparatus of using the same	10-0781369
16	Network system and control method for the same	10-1769472
17	Wireless communication system and method for idle state operation therein	10-1555557
18	Method and apparatus for configuring channel node tree in wireless communication system using orthogonal frequency division multiplexing access	10-0899758
19	Method and apparatus for Multicast over IEEE 802.11n Wireless LANs	10-1838386
20	Channel selection method of communication node in communication network	10-1817862
21	Wireless Access point	30-0993464
PCT	Wi-Fi network access system	PCT/KR2018/000290

Application patents

No	Patent application name	Application number
01	Multi-hop improvement path selection system and its method of Wi-Fi cooperative communication relay	10-0116647
02	Wi-Fi wireless communication system in multi-hop networks	10-0120418
03	Network channel allocation method	10-0105205
04	Data packets transmitting method in a wireless multi-hop network considering hop counts	10-0105216
05	Relay system with beam selection and gain control functions in high-speed data transmission systems	10-0105222
06	Gateway Selection Method in Wireless Multi-hop Networks	10-0105225
07	Multiple transmitters and multiple receiving period adaptive beamforming transmission methods in Multi-antenna Relay Systems	10-0105231
08	Inducing method for wireless signal relay participation in Wireless Multi-hop Networks	10-0105237
09	Indirect signal removing method in multi-hop relay wireless communication systems	10-0105241
10	Transmission rate controlling method in wireless LAN networks	10-0105251
11	Distributed support allocation system in wireless multi-hop network environments	10-0105255
12	Communication method of multi-hop wireless network	10-0105257
13	Configuring system and method of a multi-relay competition window	10-0154822
14	Beamforming control device and its method for Multiple relay communication	10-0005412
15	System and method for establishing route path in a multiple HOP network.	10-0040701
16	[Vietnam] Configuring system and method of a multi-relay competition window THIẾT BỊ VÀ PHƯƠNG PHÁP CẤU HÌNH CỬA SỐ TRANH CHẤP NHIỀU TRẠM CHUYỂN TIẾP	1-01928

How to contact us :

Our Website provides multiple Languages (Korean, English, Vietnamese and Hindi). You can select the language what you want.

If you want to visit our Website, please Feel free to contact us :

- <http://www.nexustech.or.kr/>

If you want to get a more information of NX1700, contact us :

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