NOC-8610
5GHz Band C Outdoor Bridging Unit
Supporting Client Bridge/AP/WDS Functions

At last, an affordable, outdoor 5GHz bridging product which fully conforms to Ofcom IR2007 and is therefore legal for use in the UK. Please note, only products which conform to IR2007 can legally be used in the licensed Band C frequency range.

The Senao outdoor 8610 Wireless High Power and High Gain Multi-Client Bridge/Access Point/ WDS (wireless distribution system) supports both 802.11b/g (2.4GHz, 11/54Mbps) and the newer, Ofcom, Band C 5.7-5.8GHz wireless standard for Fixed Wireless Access (Building-to-Building connectivity). Includes DFS operation for automatic selection of clear 5GHz channels and also auto power control to adjust power output to match required bandwidth.

The NOC-8610 product has high transmit output power and high receivable sensitivity and is fully legal for use in OFCOM's BAND C licensed frequency band (a license **must** be obtained from OFCOM - see link below). High output power and high sensitivity can extend range and coverage to reduce the roaming between APs to get more stability wireless connection. Available either with built-in 16dB 5.4-5.8GHz panel antenna for distances in excess of 5Km (bandwidth dependant) or as the EXT version so you can connect any high gain antenna you want for your environment; e.g. you might prefer to use an omni antenna for multi-point applications. To protect your wireless connectivity the NOC-8610 can encrypt all wireless transmissions through 64/128-bit WEP data encryption and also supports WPA2/WPA/802.1x for powerful security authentication. The MAC addresses filter lets you select exactly which stations should have access to your network. **Conforms to IR2007 and is legal for use under OFCOM's band C licensed band; includes DFS and ATPC functions.**

Features & Benefits	
High Speed Data Rate Up to 54Mbps	Capable of handling heavy data payloads such as MPEG video streaming
High Output Power up to 26 dBm in 11b/g	Spreads the operation distance and reduce the roaming between APs to get more stability wireless connection
IEEE 802.11b/g Compliant	Fully Interoperable with IEEE 802.11b/IEEE802.11g compliant devices
Point-to-point, Point-to-multipoint Wireless Connectivity	Let users transfer data between two buildings or multiple buildings
WPA2/WPA/ IEEE 802.1x support	Powerful data security
Hide SSID (AP Mode)	Avoids unallowable users sharing bandwidth, increases efficiency of the network
DHCP Client/ Server	Simplifies network administration
WDS (Wireless Distributed System)	Make wireless AP and Bridge mode simultaneously as a wireless repeater
MAC address filtering (AP Mode)	Ensures secure network connection
SNMP/Telnet Remote Configuration Management	Help administrators to remotely configure or manage the Access Point easily.
Watertight and Weatherproof	Avoid water invaded and weather corroded
Power-over-Ethernet	Flexible Access Point locations and cost savings
Technical Specifications	
Data Rates	1, 2, 5.5, 6, 9, 11, 12, 18, 24,36, 48, 54 Mbps
Standards	IEEE802.11a/b/g, IEEE802.3, IEEE802.3u, IEEE802.3af, IEEE802.1f, IEEE802.1x, 802.11h
Compatibility	IEEE 802.11g/ IEEE 802.11b
Power Requirements	Active Ethernet (Power over Ethernet) –48 VDC/0.375A External Unit: Auto sensing 100/240 VAC; 50/60 Hz
Regulation Certifications	FCC Part 15/UL, ETSI 300/328/CE, IR2007 Compliant.
RF Information	
Frequency Band	5GHz Band B/C: 5.47~5.825GHz 802.11b/g: U.S., Europe and Japan product covering 2.4 to 2.484 GHz, programmable for different country regulations
Media Access Protocol	Carrier Sense Multiple Access with Collision Avoidance (CSMA/CA)
Modulation Technology	Orthogonal Frequency Division Multiplexing (OFDM) DBPSK @ 1Mbps DQPSK @2Mbps CCK @ 5.5 & 11Mbps BPSK @ 6 and 9 Mbps QPSK @ 12 and 18 Mbps 16-QAM @ 24 and 36 Mbps 64-QAM @ 48 and 54 Mbps
Operating Channels	2.4GHz (802.11b/g): 11 for North America, 14 for Japan, 13 for Europe, 5GHz (Band B/Band C) GB (5.470-5.825GHz) 4 non-overlapping channel

Receive Sensitivity (Typical)	• 5.47~5.85G(Band B/C) 6Mbps@ -88dBm; 54Mbps@ -70dBm • 2.412~2.472G(IEEE802.11g) 6Mbps@ -91dBm; 54Mbps@ -74dBm • 2.412~2.472G(IEEE802.11b) 11Mbps@ -90dBm 1Mbps@ -95dBm
Available transmit power (Typical) Please note, only BAND C (5.745-5.85GHz) can be legally used for outdoor bridging between fixed point in the UK. Band B (5.470-5.725GHz) can be used for outdoor nomadic applications. Includes ATPC for auto control of power output based upon required bandwidth. Please note, to limit EIRP to the IR2007 limit of 36dB then you must ensure that any external antenna used with the 8610EXT product must have a net gain less than or equal to 19 dB i.e. a 22dB panel antenna with a 3dB loss cable would be acceptable.	8610EXT version • 5.745~5.85GHz - BAND C 18dBm @6 ~ 24Mbps 16dBm @36Mbps 14 dBm @48Mbps 13 dBm @54Mbps • 2.412~2.472G(IEEE802.11g) 26dBm @6 ~ 24Mbps 23dBm @36Mbps 22 dBm @48Mbps 21 dBm @54Mbps • 2.412~2.472G(IEEE802.11b) up to 26 dBm. @1, 2, 5.5 and 11Mbps **(Typical)** • 5.745~5.85GHz (IEEE802.11a) 20dBm @6 ~ 24Mbps 18dBm @36Mbps 16dBm @48Mbps 15dBm @54Mbps • 2.412~2.472G(IEEE802.11g) 27dBm @6 ~ 24Mbps 25dBm@36Mbps 24 dBm@48Mbps 23dBm@54Mbps • 2.412~2.472G(IEEE802.11b) 28dBm. @1, 2, 5.5 and 11Mbps
RF Connector	8610PLUS 16dB panel antenna built-in for 5GHz and ReSMA socket for 2.4GHz 8610EXT ReSMA sockets for 2.4GHz and 5GHz
Antenna (8610PLUS version only)	Frequency range 5250 MHz – 5875 MHz Gain 16 dBi VSWR 2.0 : 1 Max. Polarization Linear, vertical HPBW / horizontal 18° HPBW / vertical 18° Front to back ratio 25 dB
Networking	
Topology	Ad-Hoc, Infrastructure
Operation Mode	Point-to-Point/ Point-to-Multipoint Bridge/ AP/ Client Bridge/ WDS
Interface	Wireless IEEE802.11b/g One 10/100 RJ-45 port

Security	-IEEE802.1x Authenticator / RADIUS Client (EAPMD5/ TLS/TTLS) Support in AP Mode -WPA/WPA2 Supplicant support in Client Bridge Mode -WPA /WPA2/ Pre Share KEY (PSK) with TKIP/AES -MAC address filtering (AP only) -Hide SSID in beacons
IP Auto-configuration	DHCP client/server
Management	
Configuration	Web-based configuration (HTTP) Telnet Configuration SNMP V1
Firmware Upgrade	Upgrade firmware via web browser Serial Interface (RS-232) TFTP
Physical	
Dimensions	163.8(L)mm x 135.2(W)mm x 47.0(H)mm (EXT version) 200(L)mm × 200(W)mm × 53.6(H) mm (PLUS version)
Weight	1.2 Kg (2.6 lbs)
Radome	Colour Worm gray Material ABS, UV resistant
Environment	
Temperature Range	Operating: -20°C to 60° Storage: -40°Cto 80°
Humidity (non-condensing)	5%~95% Typical
Survival wind speed	216 Km/hr
Package Contents	Outdoor Wireless Client Bridge unit 48V, 0.375A AC/DC adapter with wall-plug power code Inline Power Injector (PoE) 

See NOC-8610 for further product information
Link to Ofcom faq site for 5GHz operation Ofcom

All specifications are subject to change without notice