

# Approved Body Type Examination Certificate

Manufacturer company name: Zyxel Communications Corporation  
Manufacturer address: No.2 Industry East RD. IX,  
Hsinchu Science Park, Hsinchu 30075,  
Taiwan, R.O.C  
Description of the radio equipment: Dual-Band Wireless AX6000 Gigabit Extender  
Trade /brand name or registered trademark: ZYXEL  
Model/type indication: WX5600-T0  
Software version: V5.70  
Hardware version: V1.0  
Frequency bands of operation: 2400 MHz to 2483.5 MHz  
5150 MHz to 5350 MHz  
5470 MHz to 5725 MHz  
5725 MHz to 5875 MHz  
Technical documentation (TD) reference: F5685LGB-VMIE  
ACB project number: ATCB029821  
Certificate number: ATCB029821, issue 1

ACB, Inc. is designated as an Approved Body under the  
U.S.-UK Mutual Recognition Agreement (Telecommunications Equipment & EMC Annexes)

**ACB, Inc.**  
**Approved Body Number 1588**  
313 Park Avenue Suite 300  
Falls Church, VA 22046, USA

In the opinion of ACB, Inc., the examination of the technical documentation as drawn up by the manufacturer demonstrates that the essential requirements of Regulation 6 (1)(a), Regulation 6 (1)(b) and Regulation 6 (2) of the Radio Equipment Regulations 2017 (S.I. No. 2017/1206) have been met. The conformity assessment on the radio equipment listed above and as described in Annex 1 to this type examination certificate has been carried out in accordance with Schedule 3, Module B, of the Radio Equipment Regulations 2017 (S.I. No. 2017/1206). This type examination certificate relates only to the documents as provided to ACB, Inc. A list of documentation forming the basis for the type examination is provided in Annex 2 to this type examination certificate.



Notified Body: Ivan Wen

30 November 2022  
Date



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The radio equipment as described and documented in the technical documentation as drawn up by the manufacturer is a Dual-Band Wireless AX6000 Gigabit Extender.

It supports IEEE 802.11b/g/n/ax (20MHz, 40MHz) WLAN technology in the 2.4 GHz bands.

It supports IEEE 802.11a/n/ac/ax (20MHz, 40MHz, 80MHz, 160MHz) WLAN technology in the 5 GHz bands.

### Details of operation:

Description of service: IEEE 802.11b/g/n/ax WLAN, 4T4R MIMO  
Transmit frequency: 2412 MHz to 2472 MHz (20MHz)  
2422 MHz to 2462 MHz (40MHz)  
Receive frequency: 2412 MHz to 2472 MHz (20MHz)  
2422 MHz to 2462 MHz (40MHz)  
Modulation: DSSS, OFDM, OFDMA  
Transmit power: 19.44 dBm, e.i.r.p.

Description of service: IEEE 802.11a/n/ac/ax WLAN, 4T4R MIMO  
Transmit frequency: 5180 MHz to 5320 MHz (20MHz)  
5190 MHz to 5310 MHz (40MHz)  
5210 MHz to 5290 MHz (80MHz)  
5250 MHz (160MHz)  
Receive frequency: 5180 MHz to 5320 MHz (20MHz)  
5190 MHz to 5310 MHz (40MHz)  
5210 MHz to 5290 MHz (80MHz)  
5250 MHz (160MHz)  
Modulation: OFDM, OFDMA  
Transmit power: 22.97 dBm, e.i.r.p.

Description of service: IEEE 802.11a/n/ac/ax WLAN, 4T4R MIMO  
Transmit frequency: 5500 MHz to 5700 MHz (20MHz)  
5510 MHz to 5670 MHz (40MHz)  
5530 MHz (80MHz)  
Receive frequency: 5500 MHz to 5700 MHz (20MHz)  
5510 MHz to 5670 MHz (40MHz)  
5530 MHz (80MHz)  
Modulation: OFDM, OFDMA  
Transmit power: 29.61 dBm, e.i.r.p.

Description of service: IEEE 802.11a/n/ac/ax WLAN, 4T4R MIMO  
Transmit frequency: 5745 MHz to 5825 MHz (20MHz)  
5755 MHz to 5795 MHz (40MHz)  
5775 MHz (80MHz)  
Receive frequency: 5745 MHz to 5825 MHz (20MHz)  
5755 MHz to 5795 MHz (40MHz)  
5775 MHz (80MHz)  
Modulation: OFDM, OFDMA  
Transmit power: 22.85 dBm, e.i.r.p.

**Annex 2 to type examination certificate for the Radio Equipment Regulations 2017 (S.I. No. 2017/1206)**

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1	Test report:	MRT Report number:	Dated:
	EMC	2205RSU035-E5-CE	18 July 2022
	Radio	2205RSU035-E1-CE	18 July 2022
	Radio	2205RSU035-E2-CE	18 July 2022
	Radio	2205RSU035-E3-CE	18 July 2022
	Radio	2208RSU059-E1	26 November 2022
	RF safety	2208RSU059-E2	04 November 2022
	Product safety	2205SSU005-E1-CE	18 July 2022

2	Technical documentations provided:		
	Block diagram	Circuit diagram/schematics	External photographs
	Internal photographs	Label drawing/location	Operational description
	Risk assessment document	Software version declaration	Test reports
	Test setup photographs	User manual	Declaration of conformity

3 Standards used to demonstrate conformity with the essential requirements of the Radio Equipment Regulations 2017 (S.I. No. 2017/1206):

Radio spectrum (Regulation 6 (2)):	EN 300 328 V2.2.2 VNS - Voluntary National Specification 2030/8/3 IR 2030 - UK Interface Requirements 2030	EN 301 893 V2.1.1
EMC (Regulation 6 (1)(b)):	EN 301 489-1 V2.2.3 EN 55032: 2015 + A1: 2020	EN 301 489-17 V3.2.4 EN 55035: 2017 + A11: 2020
RF safety (Regulation 6 (1)(a)):	EN 50385: 2017	EN IEC 62311: 2020
Product safety (Regulation 6 (1)(a)):	BS EN 62368-1: 2014	

Note: Essential requirements of Regulation 6 (3) of the Radio Equipment Regulations 2017 (S.I. No. 2017/1206) not listed above have been deemed as not being applicable to the radio equipment as described in this type examination certificate.



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4 Additional information:

The conditions for use of the radio spectrum for license exempt short range devices shall be based on the relevant interface definitions in IR 2030 - UK Interface Requirements 2030 of April 2021.

Radio Equipment Regulations 2017 (S.I. No. 2017/1206), Regulation 11: Manufacturers shall keep the technical documentation and the declaration of conformity for 10 years after the radio equipment has been placed on the market.

Radio Equipment Regulations 2017 (S.I. No. 2017/1206), Regulation 12 (1): Manufacturers shall ensure that radio equipment which they have placed on the market bears a type, batch or serial number or other element allowing its identification, or, where the size or nature of the radio equipment does not allow it, that the required information is provided on the packaging, or in a document accompanying the radio equipment.

Radio Equipment Regulations 2017 (S.I. No. 2017/1206), Regulation 12 (2)-(5): Manufacturers shall indicate on the radio equipment their name, registered trade name or registered trade mark and the postal address at which they can be contacted or, where the size or nature of radio equipment does not allow it, on its packaging, or in a document accompanying the radio equipment. The address shall indicate a single point at which the manufacturer can be contacted. The contact details shall be in a language easily understood by end-users and market surveillance authorities.

Radio Equipment Regulations 2017 (S.I. No. 2017/1206), Regulation 13 (1): Manufacturers shall ensure that the radio equipment is accompanied by instructions and safety information in a language which can be easily understood by consumers and other end-users, as determined by the UK. Instructions shall include the information required to use radio equipment in accordance with its intended use. Such information shall include, where applicable, a description of accessories and components, including software, which allow the radio equipment to operate as intended. Such instructions and safety information, as well as any labelling, shall be clear, understandable and intelligible.

Radio Equipment Regulations 2017 (S.I. No. 2017/1206), Regulation 13 (2): The following information shall also be included in the case of radio equipment intentionally emitting radio waves:

- (a) frequency band(s) in which the radio equipment operates;
- (b) maximum radio-frequency power transmitted in the frequency band(s) in which the radio equipment operates.

Radio Equipment Regulations 2017 (S.I. No. 2017/1206), Regulation 13 (3): Manufacturers shall ensure that each item of radio equipment is accompanied by a copy of the declaration of conformity or by a simplified declaration of conformity drawn up in accordance with regulation 43 (simplified declaration of conformity). Where a simplified declaration of conformity is provided, it shall contain the exact internet address where the full text of the declaration of conformity can be obtained.

Radio Equipment Regulations 2017 (S.I. No. 2017/1206), Regulation 14: In cases of restrictions on putting into service or of requirements for authorization of use, information available on the packaging shall allow the identification of the geographical area within the UK where restrictions on putting into service or requirements for authorization of use exist. Such information shall be completed in the instructions accompanying the radio equipment.

Radio Equipment Regulations 2017 (S.I. No. 2017/1206), Regulation 44 (1)-(2): The UK marking shall be affixed visibly, legibly and indelibly to the radio equipment or to its data plate, unless that is not possible or not warranted on account of the nature of radio equipment. The UK marking shall also be affixed visibly and legibly to the packaging.



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Radio Equipment Regulations 2017 (S.I. No. 2017/1206), Regulation 44 (3): On account of the nature of radio equipment, the height of the UK marking affixed to radio equipment may be lower than 5 mm, provided that it remains visible and legible.

Radio Equipment Regulations 2017 (S.I. No. 2017/1206), Schedule 7 (2): The manufacturer shall inform the approved body that holds the technical documentation relating to the type examination certificate of all modifications to the approved type that may affect the conformity of the radio equipment with the essential requirements of the Radio Equipment Regulations 2017 (S.I. No. 2017/1206) or the conditions for validity of that certificate. Such modifications shall require additional approval in the form of an addition to the original type examination certificate.

This Approved Body type examination certificate has a validity of 10 years from the date of issue.

This type examination certificate automatically expires in the following cases:

- Changes in the product identification and/or the manufacturer's identification at stated on this type examination certificate (without any technical change);
- Technical modifications in the product(s) covered by this type examination certificate that affect the compliance of the product(s) with the essential requirements of the Radio Equipment Regulations 2017 (S.I. No. 2017/1206);
- Revisions and/or updates in the (designated) standards applied in full or in part or other solutions adopted as listed in this type examination certificate which affect the demonstration of compliance of the product(s) with the essential requirements of the Radio Equipment Regulations 2017 (S.I. No. 2017/1206).

To avoid the automatic expiration of the type examination certificate, any of the three cases above would require a re-assessment of (parts of) the updated technical documentation of the product(s) and an update/re-issue of the type examination certificate by the Approved Body.

Non-designated standards or parts of designated standards were used by the manufacturer to assess the conformity with (parts of) the essential requirements in Regulation 6 (1)(a), Regulation 6 (1)(b) and Regulation 6 (2) of the Radio Equipment Regulations 2017 (S.I. No. 2017/1206).

**5 Contact information:**

For contact with ACB or questions regarding this type examination certificate:

Web: [www.acbcert.com](http://www.acbcert.com)    <http://acbcert.com/contact>    Tel.: (+1) 703 847 4700

