

# EU TYPE EXAMINATION CERTIFICATE

Radio Equipment Directive 2014/53/EU



**Certificate Number** NB2906.2024.000078  
**Project Number** SH-CERT240201077

**Product Model Number(s)** NR7501  
**Brand/Trade Name** ZYXEL  
**Product Type** 5G NR Outdoor Router

**Manufacturer** Zyxel Communications Corporation  
**Address** No.2 Industry East RD. IX,  
Hsinchu Science Park,  
Hsinchu 30075  
Taiwan

## Essential Requirements

## Results

Article 3.1(a) - Health	Conforms
Article 3.1(a) - Safety	Conforms
Article 3.1(b) - EMC	Conforms
Article 3.2 - Radio Spectrum	Conforms
Article 3.3g	N/A
Article 3.4	N/A

**Technical Documentation:** SH-CERT240201077-01

Based upon an examination of the Technical Documentation and supporting evidence, the above listed equipment was found to conform with those essential requirements of the Radio Equipment Directive 2014/53/EU as noted above.

This certificate is issued for only the equipment mentioned above and is subject to the conditions and restrictions listed in the Annex. This type examination certification is issued under Module B of the Radio Equipment Directive 2014/53/EU, applying the Notified Body Identification Number adjacent to the CE Marking is NOT permitted. No changes/modifications to the equipment which would require a re-assessment are allowed - any such change will invalidate this type examination certificate.

This certificate is valid for 5 years from the date of issue unless changes/modifications have been made to the applied standard(s) or assessed type of equipment.

Authorized By:

Certificate Issue Date  
February 6, 2024

Eddy Zong  
Certifier

# NB2906



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## Radio Equipment Directive 2014/53/EU

### ESSENTIAL REQUIREMENTS

ESSENTIAL REQUIREMENTS	APPLIED STANDARD(S)
Article 3.1(a) - Health	EN IEC 62311:2020
Article 3.1(a) - Safety	EN IEC 62368-1:2020+A11:2020
Article 3.1(b) - EMC	EN 55032:2015+A11:2020+A1:2020, EN 55035:2017+A11:2020 EN 301 489-1 V2.2.3, EN 301 489-17 V3.2.4 EN 301 489-19 V2.2.1, EN 301 489-52 V1.2.1
Article 3.2 - Spectrum	EN 300 328 V2.2.2, EN 303 413 V1.2.1 EN 301 908-1 V15.2.1, EN 301 908-13 V13.2.1 Draft EN 301 908-25 V15.1.1_0.0.18
Article 3.3g	N/A
Article 3.4	N/A

### PRODUCT TECHNICAL DETAILS

HW Version:	HW-0
SW Version:	V1.00(ACEH.0)b10

### EQUIPMENT DETAIL

Radio	Frequency Range (MHz)	Antenna Type	Modulation	Transmit Power
WLAN	2412-2472	Note 1	DSSS, OFDM	20dBm
LTE Band 1	1920-1980	Note 2	QPSK, 16QAM, 64QAM	31.03dBm
LTE Band 3	1710-1785	Note 3	QPSK, 16QAM, 64QAM	30.72dBm
LTE Band 7	2500-2570	Note 4	QPSK, 16QAM, 64QAM	30.44dBm
LTE Band 28	703-748	Note 5	QPSK, 16QAM, 64QAM	28.32dBm
5G NR n78	3300-3800	Note 6	Note 8	39.51dBm
5G NR n257	26500-29500	Note 7	Note 8	33.24dBm
5G NR n258	24250-27500	Note 7	Note 8	35.01dBm
GNSS	1559-1610	Note 7	BPSK	N/A(receiver)

- Notes
- 1) Integrated Antenna, 3dBi gain
  - 2) Integrated Antenna, 6.03dBi gain
  - 3) Integrated Antenna, 5.72dBi gain
  - 4) Integrated Antenna, 5.44dBi gain
  - 5) Integrated Antenna, 3.32dBi gain
  - 6) Integrated Antenna, 11.51dBi (Ant0); 10.9dBi (Ant3)
  - 7) Integrated Antenna
  - 8) DFT-s-OFDM PI/2BPSK, DFT-s-OFDM QPSK, DFT-s-OFDM 16 QAM, DFT-s-OFDM 64 QAM, DFT-s-OFDM 256 QAM, CP-OFDM QPSK, CP-OFDM 16 QAM, CP-OFDM 64 QAM, CP-OFDM 256 QAM

### CONDITIONS/RESTRICTIONS

The following conditions and restrictions apply:

- 1) LTE Band 28 is only allowed to operate between 703 MHz to 736 MHz for the transmitter and between 758 MHz to 791 MHz for the receiver.
- 2) 5G NR band n78 is only allowed to operate between 3400MHz-3800MHz.
- 3) 5G NR band n257 is only allowed to operate between 26 500 MHz to 27 500 MHz.
- 4) The device supports UL CA\_1C, UL CA\_3C, UL CA\_7C, UL CA\_1A-28A, UL CA\_1A-3A, UL CA\_1A-7A, UL CA\_3A-7A, UL CA\_3A-28A, UL CA\_7A-28A.
- 5) The device supports UL MIMO for n78.