

EU TYPE EXAMINATION CERTIFICATE

Radio Equipment Directive 2014/53/EU

SGS

Certificate Number

NB2906.2024.000192

Project Number

SZ-CERT240501633

Product Model Number(s)

IR624

Brand/Trade Name



Product Type

Industrial Cellular Router

Manufacturer

Beijing InHand Networks Technology
Co., Ltd.

Address

Room 501, floor 5, building 3, yard 18,
ziyue road, chaoyang district,
Beijing

Essential Requirements

Results

Article 3.1(a) - Health
Article 3.1(a) - Safety
Article 3.1(b) - EMC
Article 3.2 - Radio Spectrum

Conforms
Conforms
Conforms
Conforms

Technical Documentation:

SZ-CERT240501633-01

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.

NB2906

Authorized By:

Certificate Issue Date
May 10, 2024

Sen Lv
Certifier



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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 301 489-1 V2.2.3, EN 301 489-3 V2.3.2 EN 301489-17 V3.2.4, EN 301 489-52 V1.2.1 EN 55032:2015+A11:2020+A1:2020, EN 55035:2017+A11:2020
Article 3.2 - Spectrum	EN 300 328 V2.2.2, EN 301 893 V2.1.1, EN 300 440 V2.2.1 EN 301 908-1 V15.2.1, EN 301 908-2 V13.1.1 EN 301 908-13 V13.2.1, EN 301 908-25 V15.1.1_0.0.21

PRODUCT TECHNICAL DETAILS

Model Number(s)	IR624
HW Version:	V1.1
SW Version:	V3.0

EQUIPMENT DETAIL

Radio	Frequency range (MHz)	Antenna Type	Modulation	Transmit Power
WLAN	2412-2472	Note 1	DSSS, OFDM	19.92dBm
WLAN	5180-5240	Note 2	OFDM	19.19dBm
WLAN	5745-5825	Note 3	OFDM	13.08dBm
WCDMA B1	1920-1980/2110-2170	Note 4	16QAM, 64QAM	25dBm
WCDMA B3	1710-1785/1805-1880	Note 4	16QAM, 64QAM	25dBm
WCDMA B5	824-849/869-894	Note 4	16QAM, 64QAM	25dBm
WCDMA B8	880-915/925-960	Note 4	16QAM, 64QAM	25dBm
LTE B1	1920-1980/2110-2170	Note 5	Note 7	24.5dBm
LTE B3	1710-1785/1805-1880	Note 5	Note 7	24.5dBm
LTE B5	824-849/869-894	Note 5	Note 7	24.5dBm
LTE B7	2500-2570/2620-2690	Note 5	Note 7	24.5dBm
LTE B8	880-915/925-960	Note 5	Note 7	24.5dBm
LTE B20	832-862/791-821	Note 5	Note 7	24.5dBm
LTE B28	703-748/758-803	Note 5	Note 7	24.5dBm
LTE B38	2570-2620	Note 5	Note 7	24.5dBm
LTE B40	2300-2400	Note 5	Note 7	24.5dBm
LTE B41	2496-2690	Note 5	Note 7	24.5dBm
NR Band n1	1920-1980/2110-2170	Note 6	Note 7	24.5dBm
NR Band n3	1710-1785/1805-1880	Note 6	Note 7	24.5dBm
NR Band n5	824-849/869-894	Note 6	Note 7	24.5dBm
NR Band n7	2500-2570/2620-2690	Note 6	Note 7	24.5dBm
NR Band n8	880-915/925-960	Note 6	Note 7	24.5dBm
NR Band n20	832-862/791-821	Note 6	Note 7	24.5dBm
NR Band n28	703-748/758-803	Note 6	Note 7	24.5dBm
NR Band 38	2570-2620	Note 6	Note 7	24.5dBm
NR Band 40	2300-2400	Note 6	Note 7	24.5dBm
NR Band 41	2496-2690	Note 6	Note 7	27.5dBm
NR Band 77	3300-4200	Note 6	Note 7	27.5dBm
NR Band 78	3300-3800	Note 6	Note 7	27.5dBm

- Notes
- 1) Dipole Antenna, Ant1: 2.69dBi, Ant2:2.69dBi
 - 2) Dipole Antenna, Ant1: -0.31dBi, Ant2: -0.31dBi
 - 3) Dipole Antenna, Ant1: -0.86dBi, Ant2: -0.86dBi
 - 4) Dipole Antenna, WCDMA B1: 0.7dBi; B3: 0dBi; B5: -2.5dBi; B8:1dBi
 - 5) Dipole Antenna, LTE B1: 0.7dBi; B3: 0dBi; B5: -2.5dBi; B7: -0.1dBi; B8: 1dBi; B20: -2.5dBi; B28: -0.7dBi; B38: -0.1dBi; B40: 1.7dBi; B41: -0.1dBi
 - 6) Dipole Antenna, n1: 0.7dBi; n3: 0dBi; n5: -2.5dBi; n7: -0.1dBi; n8: 1dBi; n20: -2.5dBi; n28: -0.7dBi; n38: -0.1dBi; n40:1.7dBi; n41: -0.1dBi; n77: -0.7dBi; n78: -0.7dBi
 - 7) DFT-s-OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM; CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM.
 - 8) The device supports UL-CA_3C, UL-CA_7C, UL-CA_38C, UL-CA_40C, UL-CA_41C.
 - 9) The device supports EN-DC Band: 3A_N1A, 1A_n3A, 1A_n5A, 3A_n7A, 20A_n8A, 1A_n20A, 1A_n28A, 3A_n28A,

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7A_n28A, 20A_n28A, 1A_n38A, 1A_n40A, 3A_n40A, 8A_n40A, 3A_N41A, 1A_N77A, 3A_N77A, 20A_N77A, 28A_N77A, 1A_N78A, 3A_N78A, 5A_N78A, 7A_N78A, 8A_N78A, 20A_N78A, 28A_N78A, 38A_N78A, 41A_N78A, 1A_3A_n28A, 1A_7A_n28A, 1A_20A_n28A, 7A_20A_n28A, 1A_3A_N77A, 1A_28A_N77A, 1A_3A_N78A, 1A_7A_N78A, 1A_8A_N78A, 1A_20A_N78A, 1A_28A_N78A, 3A_7A_N78A, 3A_8A_N78A, 3A_20A_N78A, 3A_28A_N78A, 3A_38A_N78A, 7A_20A_N78A, 7A_28A_N78A.

CONDITIONS/RESTRICTIONS

The following conditions and restrictions apply:

- 1) WLAN band 5150-5250MHz for this device is restricted to indoor use only within all European Union countries.
- 2) The device supports operation in frequency bands which are not available for use in member states of the European Union and EFTA countries and which have not been included in this conformity assessment. The conformity assessment of this radio equipment is limited to those frequency bands of operation which are available for use in one or more Member States of the European Union and EFTA countries.
- 3) LTE band 28 and NR band n28 are restricted to operation in frequency range 703MHz-736MHz for the transmitter and 758-791 MHz for the receiver.
- 4) LTE band 41 and NR band n41 are restricted to operation in frequency range 2500MHz-2690MHz.
- 5) NR UE operation in Band 77 is restricted to 3 400 MHz - 4 200 MHz frequency range.
- 6) NR UE operation in Band 78 is restricted to 3 400 MHz - 3 800 MHz frequency range.

ADDITIONAL MODEL(S)

Model: IR6X4(Where X represents the numbers 0-9)

Above models are identical as model IR624 on circuitry design, PCB layout, electrical components used, internal wiring and functions. The only difference is that the products are used in different markets.