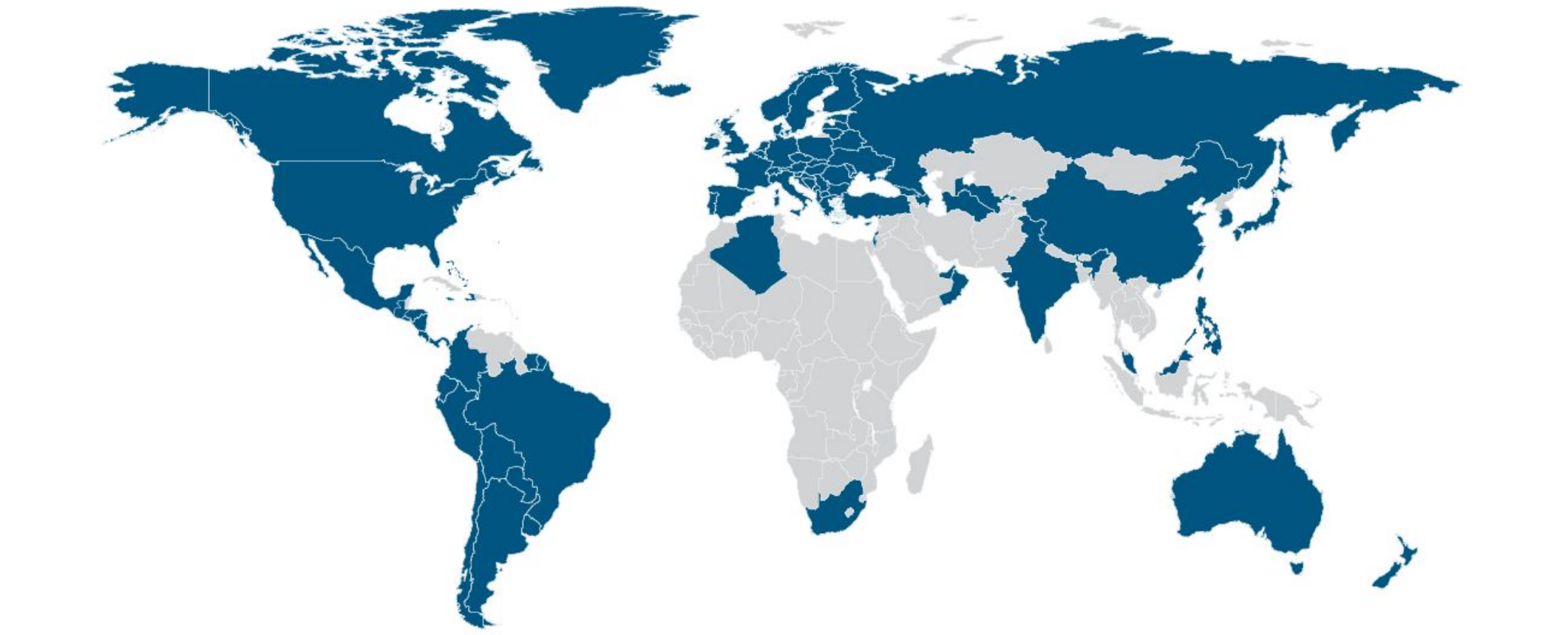




Z-Wave Global Regions

Where Z-Wave Works

With over 100 million devices in homes worldwide, Z-Wave clearly has a global presence. Over time we will see Z-Wave become available in more and more countries. Currently the Z-Wave RF has been approved for the following countries:

Albania, Algeria, Andorra, Argentina, Armenia, Australia, Austria, Azerbaijan	Latvia, Lebanon, Libya, Liechtenstein, Lithuania, Luxembourg
Bahamas, Bahrain, Barbados, Belarus, Belgium, Bermuda, Bolivia, Bosnia and Herzegovina, Brazil, British Virgin Islands, Bulgaria	Macedonia, Malaysia, Malta, Mauritius, Mexico, Moldova, Monaco, Montenegro
Canada, Cayman Islands, Chile, China, Columbia, Costa Rica, Croatia, Cyprus, Czech Republic	Netherlands, New Zealand, Nicaragua, Nigeria, Norway
Denmark, Dominican Republic	Panama, Paraguay, Peru, Poland, Portugal
Ecuador, Egypt, El Salvador, Estonia	Qatar
Finland, France, French Guiana	Romania, Republic of Korea, Russian Federation
Germany, Greece, Guatemala	San Marino, Saudi Arabia, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, St. Kitts & Nevis, Sweden, Switzerland, Suriname
Haiti, Honduras, Hong Kong, Hungary	Taiwan (China), Trinidad & Tabago, Turkmenistan, Turks & Caicos, Thailand
Iceland, India, Indonesia, Ireland, Israel, Italy	Ukraine, United Arab Emirates, United Kingdom, United States, Uruguay
Jamaica, Japan, Jordan	Vatican City
Kazakhstan, Kuwait	Yemen

Radio Frequency

The Z-Wave Developer’s Kit enables developers and Original Equipment Manufacturers (OEMs) to design and develop products that network wirelessly using RF-based Z-Wave technology.

For each country or region, the product has to apply to the standard Z-Wave frequency used and approved in that region. This table shows the current Z-Wave sub-1 GHz frequency coverage. This information is for reference only and should not be relied upon for technical or other purposes. Customers are solely responsible for verifying the frequency value and channel allocation in their respective region before developing and deploying a product.

Country/Region	Standard	Z-Wave Frequency	Residential Voltage	Frequency	Module Version	SW. Lib.
Algeria	EN 300 220	919.8 MHz	230 V	50 Hz	H	HK

Argentina	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	220 V	50 Hz	U	US
Armenia	EN 300 220	868.4 MHz, 869.85 MHz	230 V	50 Hz	E	EU
Australia	AS/NZS 4268	919.8 MHz, 921.4 MHz	230 V	50 Hz	H	ANZ
Bahamas	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	120 V	60 Hz	U	US
Bahrain	EN 300 220	868.4 MHz, 869.85 MHz	230 V	50 Hz	E	EU
Barbados	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	115 V	50 Hz	U	US
Bermuda	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	120 V	60 Hz	U	US
Bolivia	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	115 V, 230 V	50 Hz	U	US
Brazil	ANATEL Resolution 506	919.8 MHz, 921.4 MHz	127 V, 220 V	60 Hz	H	ANZ
British Virgin Islands	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	110 V	60 Hz	U	US
Canada	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	120 V	60 Hz	U	US
Cayman Islands	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	120 V	60 Hz	U	US
CEPT* Cyprus Moldova	EN 300 220	868.4 MHz, 869.85 MHz	230 V, 240 V, 220 V	50 Hz	E	EU
Chile	AS/NZS 4268	919.8 MHz, 921.4 MHz	220 V	50 Hz	H	ANZ
China	CNAS / EN 300 220 / CMIIT 2016DJ7232	868.4 MHz	220 V	50 Hz	E	CN
Colombia	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	110 V	60 Hz	U	US
Costa Rica	ARIB T96, ARIB STD-T108	922.5 MHz, 923.9 MHz, 926.3 MHz	120 V	60 Hz	H	JP
Dominican Republic	AS/NZS 4268	919.8 MHz, 921.4 MHz	115 V	60 Hz	H	ANZ
Ecuador	ARCOTEL Resolution 12-09-ARCOTEL-2107, Note EQA.45	919.8 MHz, 921.4 MHz	120 V	50 Hz	H	ANZ
Egypt	EN 300 220	868.4 MHz, 869.85 MHz	220 V	50 Hz	E	EU
El Salvador	AS/NZS 4268	919.8 MHz, 921.4 MHz	115 V	60 Hz	H	ANZ
French Guiana	EN 300 220	868.4 MHz, 869.85 MHz	220 V	50 Hz	E	EU
Georgia	EN 300 220	868.4 MHz, 869.85 MHz	220 V	50 Hz	E	EU
Guatemala	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	120 V	60 Hz	U	US
Haiti	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	110 V	60 Hz	U	US
Honduras	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	110 V	60 Hz	U	US
Hong Kong	HKTA 1035	919.8 MHz	220 V	50 Hz	H	HK
India	CSR 564 (E)	865.2 MHz	230 V	50 Hz	E	IN
Indonesia	Regulation No. 161 Tahun 2019	919.8 MHz, 921.4 MHz	230 V	50 Hz	H	ANZ

Iraq	EN 300 220	868.4 MHz, 869.85 MHz		50 Hz	E	EU
Israel		916 MHz	230 V	50 Hz	U	IL
Jamaica	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	110 V	50 Hz	U	US
Japan	ARIB STD-T108	922.5 MHz, 923.9 MHz, 926.3 MHz	100 V	50 Hz, 60 Hz	H	JP
Jordan	EN 300 220	868.4 MHz, 869.85 MHz	230 V	50 Hz	E	EU
Kazakstan	EN 300 220	868.4 MHz, 869.85 MHz	220 V	50 Hz	E	EU
Kuwait	EN 300 220	868.4 MHz, 869.85 MHz	240 V	50 Hz	E	EU
Lebanon	EN 300 220	868.4 MHz, 869.85 MHz	220 V	50 Hz	E	EU
Libya	EN 300 220	868.4 MHz, 869.85 MHz	127 V	50 Hz	E	EU
Macau	Clause 2, Article 58-2 of Radio Waves Act	920.9 MHz, 921.7 MHz, 923.1 MHz	230 V	50 Hz	H	KR
Malaysia	MCMC MTSFBTC T007: 2014	919.8 MHz, 921.4 MHz	230 V	50 Hz	H	ANZ
Maldives	EN 300 220	868.4 MHz, 869.85 MHz	220 V	60 Hz	E	EU
Mauritius	EN 300 220	868.4 MHz, 869.85 MHz	230 V	50 Hz	E	EU
Mexico	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	127 V	60 Hz	U	US
Morocco	CNAS / EN 300 220 / CMIIT 2016DJ7232	868.4 MHz	127 V, 220 V	50 Hz	E	CN
New Zealand	AS/NZS 4268	919.8 MHz, 921.4 MHz	230 V	50 Hz	H	ANZ
Nicaragua	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	120 V	60 Hz	U	US
Nigeria	EN 300 220	868.4 MHz, 869.85 MHz	240 V	50 Hz	E	EU
Oman	EN 300 220	868.4 MHz, 869.85 MHz	240 V	50 Hz	E	EU
Panama	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	110 V, 120 V	60 Hz	U	US
Paraguay	AS/NZS 4268	919.8 MHz, 921.4 MHz	220 V	50 Hz	H	ANZ
Peru	AS/NZS 4268	919.8 MHz, 921.4 MHz	220 V	60 Hz	H	ANZ
Philippines	EN 300 220	868.4 MHz, 869.85 MHz	220 V	60 Hz	E	EU
Qatar	EN 300 220	868.4 MHz, 869.85 MHz	240 V	50 Hz	E	EU
Russia	GKRCh/EN 300 220	869.0 MHz	230 V	50 Hz	E	RU
Saudi Arabia	EN 300 220	868.4 MHz, 869.85 MHz	127 V, 220 V	60 Hz	E	EU
Singapore	IMDA TS SRD	920.9 MHz, 921.7 MHz, 923.1 MHz	230 V	50 Hz	H	KR

South Africa	ICASA/EN 300 220	868.4 MHz, 869.85 MHz	230 V	50 Hz	E	EU
South Korea	Clause 2, Article 58-2 of Radio Waves Act	920.9 MHz, 921.7 MHz, 923.1 MHz	230 V	60 Hz	H	KR
St Kitts & Nevis	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	110 V, 230 V	60 Hz	U	US
Suriname	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	127 V	60 Hz	U	US
Taiwan	Changed from JP May 2017	920.9 MHz, 921.7 MHz, 923.1 MHz	110 V	60 Hz	H	KR
Thailand	Clause 2, Article 58-2 of Radio Waves Act	920.9 MHz, 921.7MHz, 923.1 MHz	220 V	60 Hz	H	KR
Trinidad & Tabago	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	115 V	60 Hz	U	US
Turkmenistan	EN 300 220	868.4 MHz, 869.85 MHz	220 V	50 Hz	E	EU
Turks & Caicos Islands	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	110 V, 120 V	60 Hz	U	US
UAE	EN 300 220	868.4 MHz, 869.85 MHz	220 V	50 Hz	E	EU
Uruguay	AS/NZS 4268	919.8 MHz, 921.4 MHz	230 V	50 Hz	H	ANZ
USA	FCC CFR47 Part 15.249	908.4 MHz, 916 MHz	120 V	60 Hz	U	US
Uzbekistan	Uz.SMT.01.334.1961745	868.4 MHz, 869.85MHz	220 V	50 Hz	E	EU
Venezuela		919.8 MHz, 921.4 MHz		50 Hz	H	ANZ
Vietnam	AS/NZS 4268	919.8 MHz, 921.4 MHz	230 V	50 Hz	H	ANZ
Yemen	EN 300 220	868.4 MHz, 869.85 MHz	230 V	50 Hz	E	EU

* CEPT is the European regional organization dealing with postal and telecommunications issues and presently has 45 Members: Albania, Andorra, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Montenegro, Monaco, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Turkey, Ukraine, United Kingdom, and Vatican.