



Wi-Fi CERTIFIED™ Certificate

This certificate lists the features that have successfully completed Wi-Fi Alliance interoperability testing. Learn more: www.wi-fi.org/certification/programs



Certification ID: WFA100880

Product Info

Date of Certification	July 7, 2020
Company	Ruckus Wireless, Inc.
Product Name	Ruckus R650 / Virtual SmartZone
Product Model Variant	2020-07-07 (WFA100880 - 11348010)
Model Number	R650/vSZ
Category	Routers
Sub-category	Enterprise/Service Provider Access Point, Switch/Controller or Router

Summary of Certifications

CLASSIFICATION	CERTIFICATION
Access	Passpoint® Release 2
Connectivity	2.4 GHz Spectrum Capabilities 5 GHz Spectrum Capabilities Wi-Fi CERTIFIED 6® Wi-Fi CERTIFIED™ a Wi-Fi CERTIFIED™ ac Wi-Fi CERTIFIED™ b Wi-Fi CERTIFIED™ g Wi-Fi CERTIFIED™ n Wi-Fi Enhanced Open™ 2018-04
Optimization	WMM® Wi-Fi Agile Multiband™ Wi-Fi Optimized Connectivity™ 2018 Wi-Fi Vantage™ Release 2
Security	Protected Management Frames WPA2™-Enterprise 2018-04 WPA2™-Personal 2018-04 WPA3™-Enterprise 2019-12 WPA3™-Personal 2019-12



Wi-Fi CERTIFIED™ Certificate

Certification ID: WFA100880



Summary of Certifications (continued)

Page 2 of 4

CLASSIFICATION

CERTIFICATION

Spectrum & Regulatory
Features

Spectrum & Regulatory



Wi-Fi CERTIFIED™ Certificate

Certification ID: WFA100880



Role: Access Point

Page 3 of 4

Wi-Fi Components

Wi-Fi Component Operating System

Linux

Wi-Fi Component Firmware

5.2.1.7.16

RF Architecture

Bands Supported	Transmit (Tx)	Receive (Rx)
2.4 GHz	2	2
5 GHz	4	4

Certifications

2.4 GHz Spectrum Capabilities

20 MHz Channel Width in 2.4 GHz
40 MHz Channel Width in 2.4 GHz

5 GHz Spectrum Capabilities

20 MHz Channel Width in 5 GHz
40 MHz Channel Width in 5 GHz
80 MHz Channel Width in 5 GHz

Passpoint® Release 2

Online Sign Up and Policy provisioning

Protected Management Frames

Spectrum & Regulatory

802.11d
802.11h

WMM®

WPA2™-Enterprise 2018-04

EAP methods

WPA2™-Personal 2018-04

WPA3™-Enterprise 2019-12

EAP methods
192-bit security

WPA3™-Personal 2019-12

Wi-Fi Agile Multiband™

Automatically populate BSS Transition candidate list
Cellular Data aware
Fast Transition OTA on WPA2-Enterprise
Fast Transition OTA on WPA2-Personal

Wi-Fi CERTIFIED 6®

4 antenna support
A-MPDU with A-MSDU



Wi-Fi CERTIFIED™ Certificate

Certification ID: WFA100880



Role: Access Point

Page 4 of 4

Wi-Fi CERTIFIED 6® (continued)

DL MU-MIMO
DL OFDMA
Individual Target Wake Time
LDPC Rx
LDPC Tx
Operating mode indication
SU beamformer
UL OFDMA

Wi-Fi Enhanced Open™ 2018-04

Wi-Fi Optimized Connectivity™ 2018

FILS Indication Element support
FILS Higher Layer Protocol with DHCP v4 Rapid Commit
FILS Higher Layer Protocol with DHCP v4 Rapid Commit using an external DHCP server
Reduced Neighbor Report included in FILS Discovery frames
Reduced Neighbor Report includes all neighboring BSS

Wi-Fi CERTIFIED™ a

Wi-Fi CERTIFIED™ ac

RTS with BW Signaling
Extended 5 GHz Channel Support
A-MPDU with A-MSDU
DL MU-MIMO
LDPC Rx
LDPC Tx
MCS 8-9 Rx
Short Guard Interval
STBC
SU beamformer

Wi-Fi Vantage™ Release 2

Wi-Fi CERTIFIED™ b

Wi-Fi CERTIFIED™ g

Wi-Fi CERTIFIED™ n

OBSS on Extension Channel
Short Guard Interval
STBC
A-MPDU Tx