



# 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](http://www.wi-fi.org/certification/programs)



**Certification ID: WFA91860**

## Product Info

Date of Certification	September 20, 2019
Company	Samsung Electronics
Product Name	SM-W2020
Product Model Variant	2019-09-20 (WFA91860 - 9822531)
Model Number	SM-W2020
Category	Phones
Sub-category	Smartphone

## Summary of Certifications

CLASSIFICATION	CERTIFICATION
Applications & Services	Voice-Enterprise
Connectivity	2.4 GHz Spectrum Capabilities 5 GHz Spectrum Capabilities Wi-Fi CERTIFIED™ a Wi-Fi CERTIFIED™ ac Wi-Fi CERTIFIED™ b Wi-Fi CERTIFIED™ g Wi-Fi CERTIFIED™ n Wi-Fi Direct®
Optimization	WMM® WMM®-Admission Control WMM®-Power Save Wi-Fi Agile Multiband™ Wi-Fi Optimized Connectivity™ 2018
Security	Protected Management Frames WPA2™-Enterprise 2018-04 WPA2™-Personal 2018-04 WPA3™-Enterprise 2018-04 WPA3™-Personal 2019-08 WPA™-Enterprise



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## Summary of Certifications (continued)

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CLASSIFICATION	CERTIFICATION
Security	WPA™-Personal
Spectrum & Regulatory Features	Spectrum & Regulatory



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Role: Station

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## Wi-Fi Components

### Wi-Fi Component Operating System

Android, version:9.0

### Wi-Fi Component Firmware

100.14.18 18.38.8.2

### RF Architecture

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

## Certifications

### 2.4 GHz Spectrum Capabilities

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

### WMM®-Power Save (continued)

Legacy Power Save  
Unschedule auto PS

### 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

### WPA2™-Enterprise 2018-04

EAP methods  
EAP AKA  
EAP AKA Prime  
EAP SIM  
EAP TLS  
EAP TTLS  
PEAPv0  
PEAPv1

### Protected Management Frames

### Spectrum & Regulatory

802.11h

### WPA2™-Personal 2018-04

### Voice-Enterprise

### WPA3™-Enterprise 2018-04

### WMM®

EAP methods  
EAP AKA  
EAP AKA Prime  
EAP SIM  
EAP TLS

### WMM®-Admission Control

### WMM®-Power Save



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## WPA3™-Enterprise 2018-04 (continued)

EAP TTLS  
PEAPv0  
PEAPv1

## Wi-Fi CERTIFIED™ n

A-MPDU Tx  
OBSS on Extension Channel  
Short Guard Interval

## WPA3™-Personal 2019-08

## Wi-Fi Direct®

## WPA™-Enterprise

## Wi-Fi Optimized Connectivity™ 2018

## WPA™-Personal

## Wi-Fi Agile Multiband™

Beacon Report Measurement Active Mode  
Beacon Report Measurement Passive Mode  
BTM Query  
Cellular Data capable  
Fast Transition OTA on WPA2-Personal

## Wi-Fi CERTIFIED™ a

## Wi-Fi CERTIFIED™ ac

Extended 5 GHz Channel Support  
A-MPDU with A-MSDU  
DL MU-MIMO  
LDPC Rx  
MCS 8-9 Rx  
Short Guard Interval  
LDPC Tx  
SU beamformee

## Wi-Fi CERTIFIED™ b

## Wi-Fi CERTIFIED™ g