



## Wi-Fi CERTIFIED™ Interoperability 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: WFA72721**

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<b>Date of Last Certification</b>	November 12, 2018
<b>Company</b>	Samsung Electronics
<b>Product</b>	SM-N950F/DS
<b>Model Number</b>	SM-N950F/DS
<b>Product Identifier(s)</b>	
<b>Category</b>	Phones
<b>Subcategory</b>	Smartphone, multi-mode (Wi-Fi and other)
<b>Hardware Version</b>	Product: REV0.0, Wi-Fi Component: REV0.0
<b>Firmware Version</b>	Product: N950F.000, Wi-Fi Component: 13.38.13
<b>Operating System</b>	Android, version: 9.0
<b>Frequency Band(s)</b>	2.4 GHz, 5 GHz

### Summary of Certifications

<b>CLASSIFICATION</b>	<b>PROGRAM</b>
Connectivity	Wi-Fi CERTIFIED™ a, b, g, n, ac
	WPA™ – Enterprise, Personal
	WPA2™ – Enterprise, Personal
	Wi-Fi Direct®
Optimization	WMM®
	WMM®-Admission Control
	WMM®-Power Save
Applications & Services	Miracast® - Source
	Voice-Enterprise



**Security**

WPA™ – Enterprise, Personal  
WPA2™ – Enterprise, Personal  
EAP Type(s)  
EAP-TLS  
EAP-TTLS/MSCHAPv2  
PEAPv0/EAP-MSCHAPv2  
PEAPv1/EAP-GTC  
EAP-SIM  
EAP-AKA  
EAP-AKA Prime  
EAP-FAST  
Protected Management Frames

**Wi-Fi CERTIFIED™ a**

**Wi-Fi CERTIFIED™ b**

**Wi-Fi CERTIFIED™ g**

**Wi-Fi CERTIFIED™ n**

2.4 GHz, 5 GHz  
2 Spatial Streams 2.4 GHz  
2 Spatial Streams 5 GHz  
Short Guard Interval  
TX A-MPDU  
STBC Receive  
40 MHz operation in 5 GHz  
HT Duplicate Mode (MCS 32)

**Wi-Fi CERTIFIED™ ac**

2 Spatial Streams 5 GHz  
Rx MCS 8-9 (256-QAM)  
Rx STBC 2x1  
Rx A-MPDU of A-MSDU  
Low Density Parity Check coding  
Tx SU beamformee  
Rx DL MU-MIMO  
Extended 5 GHz Channel Support

**Wi-Fi Direct®**

2.4 GHz, 5 GHz

**WMM®**

**WMM®-Admission Control**

**WMM®-Power Save**

**Miracast®**

Release 1  
Source Device  
Content Protection

**Voice-Enterprise**

**Spectrum and Regulatory Features**

802.11h