Wi-Fi
CERTIFICATION

Wi-Fi CERTIFIED™ is an internationally-recognised seal of approval for products indicating that they have met industry-agreed standards for interoperability, security and a range of application specific protocols.

Wi-Fi CERTIFIED products have undergone rigorous testing by authorised test laboratories such as SGS. When a product successfully passes testing, the manufacturer or vendor is granted the right to use the Wi-Fi CERTIFIED logo. Certification means that a product has been tested in numerous configurations with a diverse sampling of other devices to validate its interoperability with other Wi-Fi CERTIFIED equipment operating in the same frequency band.

Certification is available for customers worldwide, enterprise and operator-specific products, including smartphones, appliances, computers and peripherals, networking infrastructure and consumer electronics. In retail, the Wi-Fi CERTIFIED logo gives consumers confidence that a product will deliver a good user experience and meet industry standards. Service providers and enterprise IT managers specify Wi-Fi CERTIFIED to reduce support costs and ensure a product has met industry-agreed requirements.

Wi-Fi CERTIFIED products deliver interoperability, industry-standard security protections and the latest technology.

SGS started testing Wi-Fi products in 2004. Through industry-developed comprehensive testing, SGS ensures that Wi-Fi products from multiple manufacturers work well together. SGS provides the widest range of Wi-Fi certification programmes, testing chambers and testers to customers worldwide. SGS guarantees customer satisfaction by providing prompt testing results and solutions. SGS periodically provides customers with a list of high-frequency failed test cases to reduce debugging time and effort.

A company must be a member of the Wi-Fi Alliance to have its products tested for certification and use the Wi-Fi CERTIFIED logo and associated trademarks.

Certification programmes from SGS cover the following categories:

CONNECTIVITY

- Interoperable connectivity: Wi-Fi CERTIFIED a in 5 GHz and Wi-Fi CERTIFIED b/g in 2.4 GHz

- Advanced Wi-Fi: Wi-Fi CERTIFIED n in both 2.4 and 5 GHz for high-performance Wi-Fi networking

- Wi-Fi certified ac: The very latest version of Wi-Fi in 5 GHz, pushing Wi-Fi past the gigabit-per-second data rate milestone for network capacity

- Wi-Fi Direct®: Allows Wi-Fi client devices that connect directly without use of an access point, to enable applications such as printing, content sharing and display. Wi-Fi Direct certifies products which implement technology defined in the Wi-Fi Peer-to-Peer Technical Specification. Application Service Platform and optional services are defined in the Wi-Fi Peer-to-Peer Services Technical Specification

SECURITY

- WPA2™: (Wi-Fi Protected Access® 2): Wi-Fi wireless network security offers government-grade security mechanisms for both personal and enterprise environments

- EAP (Extensible Authentication Protocol): A set of authentication mechanisms used to validate the identity of network devices in the enterprise

- Protected Management Frames: Wi-Fi CERTIFIED WPA2 with Protected Management Frames extends WPA2 protection to unicast and multicast management action frames, which is playing an increasing role in advanced Wi-Fi applications

SGS

RF COEXISTENCE

- CWG-RF: Developed with CTIA®, this is a test programme developed for converged devices with both Wi-Fi and cellular technology. The testing provides detailed information about the performance of the Wi-Fi radio in a converged handset, as well as how the cellular and Wi-Fi radios interact with one another. Although this test programme is not an element of Wi-Fi certification, completion of the testing is mandatory for Wi-Fi enabled handsets seeking CTIA certification

ACCESS

- Passpoint™: Enables SIM and non-SIM mobile devices to discover, select and connect to Wi-Fi networks without user intervention. Passpoint devices "see behind" the SSID (network name) to select a network based on ownership, services and performance characteristics. Wi-Fi network connections use an enhanced set of industry-standard WPA2 security protections; compatibility with legacy devices can be retained through deployment of multiple SSIDs. Passpoint certifies products which implement technology defined in the Wi-Fi Alliance Hotspot 2.0 Technical Specification. The technology behind Passpoint is foundational to Wi-Fi roaming and has been specified by both Wireless Broadband Alliance and the GSMA Terminal Steering Group

- Wi-Fi Protected Setup™: Facilitates easy set-up of security features using a Personal Identification Number (PIN) or other defined methods within the Wi-Fi device. Wi-Fi Protected Setup certifies products which implement technology defined in the Wi-Fi Simple Configuration Technical Specification

- IBSS with Wi-Fi Protected Setup: Enables ad-hoc connections between devices to complete tasks such as file printing or sharing. Designed to ease setup of connection for devices with limited user interface. IBSS with Wi-Fi Protected Setup certifies products which implement technology defined in the IBSS with Wi-Fi Protected Setup Specification

APPLICATIONS AND SERVICES

- Miracast®: Provides seamless display of content between devices, regardless of brand, without cables or a network connection. Miracast® certifies products which implement technology defined in the Wi-Fi Display Technical Specification

- Voice-Enterprise: Supports a good experience with voice applications over Wi-Fi, enabling fast transitions between access points and providing management. Voice-Enterprise builds on the Voice-Personal certification features

- Wi-Fi Aware™: Enables devices in proximity to detect each other by using a power efficient mechanism that establishes a common "heartbeat" and aligns communication windows. Wi-Fi Aware improves on existing proximity offerings by delivering a truly here-and-now contextual awareness solution that empowers users to find services that match their interests. It works well indoors and in dense environments, without requiring a cellular, Wi-Fi, or GPS connection

OPTIMISATION

- TDLS (Tunneled Direct Link Setup): Allows network-connected devices to create a secure, direct link to transfer data more efficiently

- WMM® (Wi-Fi Multimedia™): Support for multimedia content over Wi-Fi networks enabling Wi-Fi networks to prioritise traffic generated by different applications using Quality of Service (QoS) mechanisms. WMM certifies products which implement technology defined in the WMM Technical Specification

- WMM-Admission Control: Enhanced bandwidth management tools to optimise the delivery of voice and other traffic in Wi-Fi networks. WMM-Admission Control certifies products which implement technology defined in the WMM Technical Specification

- WMM-Power Save: Power savings for multimedia content over Wi-Fi networks - helps conserve battery life while using voice and multimedia applications by managing the time the device spends in sleep mode

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CONTACT US

For further information, please contact your local SGS representative or email the global team at
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WHEN YOU NEED TO BE SURE

SGS