



# Wi-Fi Feature Lists

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This document provides Wi-Fi Feature Lists for Realtek Low Power Wi-Fi solution.

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# 1 Introduction

This document provides Wi-Fi Feature Lists for Realtek Low Power Wi-Fi solution.

## 2 WLAN Feature List

No.	WLAN Features	Content	Status
1	Wireless Operation Mode	Station mode	Done
		SoftAP mode	Done
		STA+AP concurrent mode (8189em is ready)	Done
		Promiscuous mode	Done
2	Wireless Network Type	802.11b	Done
		802.11g	Done
		802.11n	Done
		802.11b/g mixed mode	Done
		802.11b/g/n mixed mode	Done
3	Security Authentication Mode	Open	Done
		Shared key	Done
		WPA PSK	Done
		WPA2 PSK	Done
4	Security Encryption Mode	WEP	Done
		TKIP	Done
		AES	Done
5	Power Saving Mechanism	802.11 power save (LPS)	Done
		Inactive power save (IPS)	Done
6	Supported PHY Rate	72.2Mbps receive PHY rate and 72.2Mbps transmit PHY rate using 20MHz bandwidth	Done
		150Mbps receive PHY rate and 150Mbps transmit PHY rate using 40MHz bandwidth	Done
7	Host Interface (for 8189em only)	GSPI interface for configurable endian, and up to 48M clock	Done
		SDIO interface	Doing
8	Dynamic Mechanism for PHY Config	Rate Adaptive	Done
		TX Power Tracking	Done

No.	WLAN Features	Content	Status
		Dynamic TX Power	Done
		Dynamic Initial Gain	Done
9	Mass Production Support	MP test command support	Done
10	Wi-Fi Protected Setup	PBC and PIN	Done
11	Wi-Fi Direct	P2P connect with android device	Doing

### 3 Network Protocol Feature List

No.	Network layer Feature List (LWIP)	Status
1	Supports multiple network interface IP forwarding	Done
2	Support for ICMP protocol	Done
3	Experimental extensions including UDP (User Datagram Protocol)	Done
4	Including congestion control, RTT estimation, fast recovery and fast forwarding TCP (Transmission Control Protocol)	Done
5	Provide specialized internal callback interface (Raw API), used to improve application performance	Done
7	Supports the latest version of ppp	Done
8	Support for IP fragment.	Done
9	Support DHCP protocol, both server and client	Done
10	Support HTTP Server	Done

### 4 Application Layer Feature List

No.	Application layer Feature List	Status
1.	Support Ping Test	Done
2.	Support iPerf throughput test	Done
3.	Support Simple Config	Done
4.	Support SoftAP WEB Configuration	Done
5.	Support Secure Socket Layer	Done

