

RTL8186 wireless LAN Access Point System Specification

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Revision History

Issue	Revision	Details of Change	Issue Date
Issue 1	0.1	First Release	9/2/2004
Issue 2	0.2	Update some features in wireless protocol	11/26/04

1. Introduction

Realtek is offering a complete solution for wireless LAN Access Point in both hardware and software. The software platform is based on Linux system, which could provide rich networking protocols and with great performance in system stability.

This document will present the software components and their features offered by RTL8186 turnkey solution.

2. Component Details

Wireless LAN protocol

- 802.11 a/b/g Access Point protocol, support maximum client associations up to 64.
- Support Tx rate adaptive
- Support wireless security for WEP 64bit and 128bits, WPA/WPA2 TKIP, AES and mixed mode (TKIP+AES) for both WPA-Personal (PSK) and WPA-Enterprise (TLS)
- Support the feature to suppress SSID broadcasting
- Support the feature to accept/deny client association by MAC address
- Support Auto-Channel selection
- Support 802.11f D5 (IAPP) protocol
- Support a feature could enable/disable 802.11g protection mode
- 802.11a/b/g client mode
 - Support Ad-hoc and infrastructure mode with roaming capability
 - Support wireless security for WEP, WPA TKIP and WPA2 AES PSK
 - Support MAC Clone (single Ether device) and NAT2.5 (Multiple Ether clients)
 - Support Ethernet client for protocol TCP/IP, IPX, AppleTalk and PPPoE
 - Support site survey scan and manual connect
- Supports WDS (Wireless Distribution System) mode with WEP/TKIP/AES encryption, which could be used as Ethernet-Bridge between wireless Access Point. Allow to add up to 8 WDS entries
- Could dynamically configure wireless interface to disable, AP, client, WDS and WDS+AP
- Support Realtek EasyConfig protocol in Button and Q&A mode, which will setup wireless security automatically between Realtek client and Access Point

Networking Protocol

- TCP, UDP, TCMP, ICMP, ARP
- IEEE 802.1d compliant bridging
- DHCP Server/Client
- Realtek Auto-Discovery protocol

Administration/Management/Configuration

- Web-based configuration and management interface
- Firmware update through web
- Configuration backup/restore to/from a file. Reset configuration to factory default

- Display real-time information for system setting, statistics and associated wireless client status.
- User name/password authentication for web server login and logout
- A setup wizard to guide user to do configuration in step
- A push button to reboot system or reload setting to factory default