AN-790 IEEE 802.11a/b/g/n 2.4GHz and 5GHz USB Module

AirRunner™ WiFi Series

The AN-790 is our latest 802.11a/b/g/n wireless USB v2.0 adapter that delivers incomparable wireless performance no matter what the host platform is. The IEEE 802.11a/b/g/n draft 2.0 compliant USB adapter supports a throughput rate of up to 300Mbps, providing Ethernet equivalent speeds to access your corporate network or the Internet in a wireless environment. Once connected, your device will share a high-speed Internet connection, photos, files, music, videos, printers, and storage just like a wired connection.

The AN-790 operates in the license exempt WiFi bands from 5.2GHz to 5.8GHz in IEEE 802.11a networks and 2.4GHz while operating in IEEE 802.11b/g networks. Utilizing the MIMO (Multiple-input multiple-output) design implementation, the AN-790 provides 2 embedded antennas which ensure not only the optimization of speed but also maximum coverage.

Security has never been easier than with the AN-790. It features WPS (Wi-Fi Protected Setup) for easier security setup. By supporting both the PIN and PBC (Push Button) methods, in which the user simply enters a pin code or pushes a button, a secured wireless connection can easily be established. A secured network is no longer something that needs to be an arduous task.

AN-790 at a Glance

Chipset	Ralink RT2870 + RT2850
Transmit Power	15 dBm
Receive Sensitivity	-83 dBm @ 11 Mbps data rate
Antenna Configuration	2T2R Integrated

IEEE	Radio	RoHS	Interface
IEEE 802.11n	Ralink	RoHS	Wireless USB

AN-790 mPCI Module

Key Features

- **High-speed networking (802.11n) , date rate up to 300Mbps for 40MHz**
- **WiFi CERTIFIED 802.11N draft v 2.0.**
- **WPA/WPA2, WMM and WPS certified**
- **Multiple-Input-Multiple-Output (MIMO) technology using 2*2 embedded antenna design**
- **USB v2.0 compliant**

Radio Specification				
Standard	IEEE 802.11a/b/g/n (draft 2.0) compliant, USB 2.0 compliant			
Chipset	Ralink RT2870 MAC/BB Processor and RT2850 RF FEM			
Modulation	DSS: CCK, DQPSK, DBPSK			
	OFDM: BPSK, QPSK, 16-QAM, 64-QAM			
	11n: BPSK, QPSK, 16-QAM, 64-QAM			
RF Frequency *	**USA (FCC)**		**Europe (ETSI)**	**Japan (TELEC)**
IEEE 802.11a ISM Band	5.15GHz – 5.35GHz		5.15GHz – 5.35GHz	5.15GHz – 5.25GHz
	5.47GHz ~ 5850GHz		5.47GHz – 5.725GHz	5.25GHz ~ 5.35GHz
IEEE 802.11b/g ISM Band	2.412GHz ~ 2.462GHz		2.412GHz ~ 2.472GHz	2.412GHz ~ 2.472GHz
IEEE 802.11gn 20MHz band	2.412GHz ~ 2.462GHz		2.412GHz ~ 2.472GHz	2.412GHz ~ 2.472GHz
IEEE 802.11gn 40MHz band	2.422GHz ~ 2.452GHz		2.422GHz ~ 2.462GHz	2.422GHz ~ 2.462GHz
RF Output Power (± 2dB)	**IEEE 802.11b (1Tx)**	1/2/5.5/11M = 15dBm		
	IEEE 802.11g (1Tx)	6~18Mbps = 15dBm, 24/36 = 14dBm, 48/54 = 13dBm		
	IEEE 802.11gn (2Tx)	HT20	15dBm	
		HT40	13dBm	
	IEEE 802.11a (1Tx)	5150~5350MHz	6~18Mbps = 11dBm, 24/36 = 10dBm, 48/54 = 9dBm	
		5470~5725MHz	6~18Mbps = 9dBm, 24/36 = 8dBm, 48/54 = 7dBm	
		5725~5850MHz	6~18Mbps = 12dBm, 24/36 = 11dBm, 48/54 = 10dBm	
	HT20	5150~5350MHz	10dBm	
		5470~5725MHz	8dBm	
		5725~5850MHz	11dBm	
	HT40	5150~5350MHz	10dBm	
		5470~5725MHz	8dBm	
		5725~5850MHz	11dBm	
Receiver Sensitivity	**IEEE 802.11a/g**		**IEEE 802.11b**	**IEEE 802.11n**
	-68dBm @ 54mbps		-83dBm @ 11Mbps	-64dBm @ HT20 (MCS15)
Antenna Design	2T2R Integrated PCB antenna			
Power Consumption	IEEE 802.11a/b/g/n Tx ≤ 500mA, Rx ≤ 480mA			
LED Definition	Green = link, Off = power off, Fast Blinking = data transmission, Slow blink = no data transmission			

* Disable 5600~5650MHz due to Environment Canada weather satellites operating in the band are protected.

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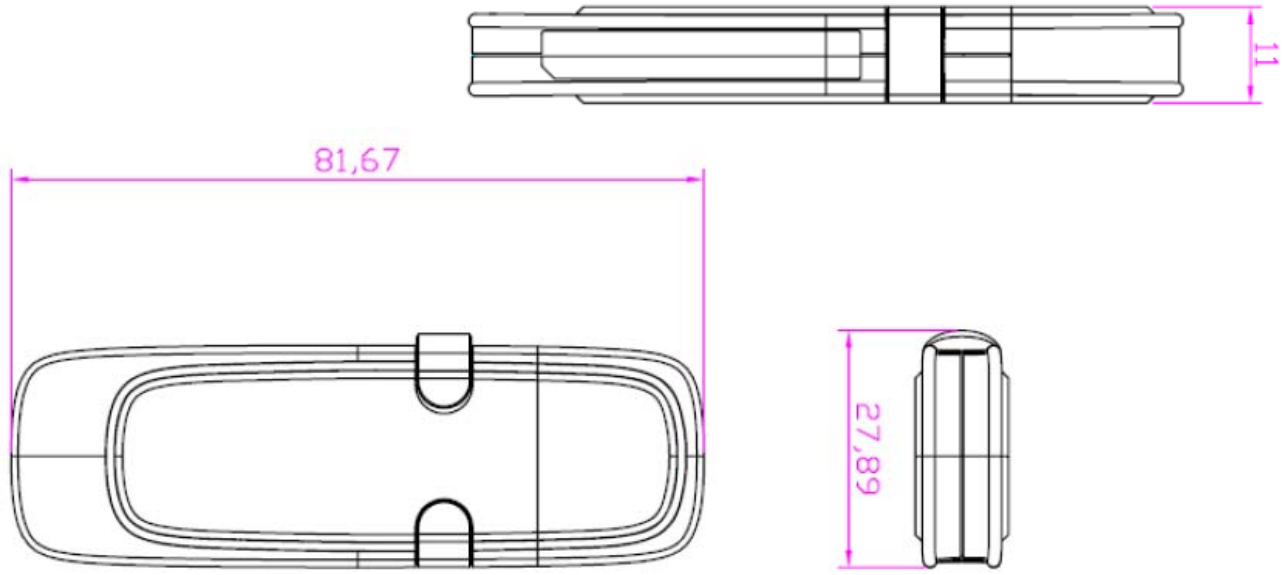
Software	
Standards	IEEE 802.11i and IEEE 802.1x
Security	WPA / WPA2 / WPA-PSK / WPA2-PSK, 64 & 128-bit WEP, EAP-TLS / EAP-TTLS(Vista not supported) / EAP-PEAP / EAP-SIM
QOS	WMM Capable
WPS	PBC (Push Button), Clients PIN (Enrollee), AP's PIN (Registrar)
Supported OS	Win2k / XP / Vista32 / Vista 64 / MAC 10.3 / 10.4 / 10.5
Power Management	Power save mode (not supported in Vista)
Operating modes	Infrastructure and Ad-hoc
PID / VID	0CDE 0028 (No-brand)

Physical Specification	
Interface	USB 2.0
Dimensions	816.7mm x 110mm x 278.9mm
Weight	≤ 50g
Operating voltage	DC 5V ± 5%
Working Temperature	0°C to 55°C, 80% relative humidity (non-condensing)
Storage Temperature	-30°C to 70°C, 95% relative humidity (non-condensing)
Lead Free	RoHS Compliant

Outline Drawing



Warranty	
Warranty Period	1 Year limited warranty from the date of purchase

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