ORiNOCO® USB-9100 Client Adapter

High Performance 802.11ac Wireless Client

High Speed, Extended Range, Flexible and Secure 802.11ac Wireless Connectivity for Laptop or Desktop Computers

ORiNOCO® USB-9100 Client Adapter enables a high performance, secure and reliable connection to a WLAN network from any laptop or desktop computer that supports a USB port. With wireless networking data rates reaching 866 Mbps using 802.11ac MiMo 2x2 technology, this dual band 802.11a/b/g/n/ac adapter enables seamless roaming between 5 GHz 802.11a/n/ac and 2.4 GHz 802.11b/g/n networks, allowing users to move between home, work and public WiFi spaces with better range and throughput while giving maximum flexibility compatibility with previous 802.11a/b/g/n networks.

The ORiNOCO® USB-9100 Client Adapter sets new standards in throughput and range to deliver the ultimate wireless quadruple play experience for video, voice and data transmission in the home, for business and on the road. Its MiMO 2x2 architecture maximizes link data rate up to 866 Mbps while its USB 3.0 interface efficiently transfers the data flow to the host computer delivering higher performances than other USB adapters.

High-Performance Wireless with Enhanced Coverage

- 802.11ac MIMO 2x2 solution for 5 GHz band
- Complete 802.11a/b/g/n compatibility for 2.4 GHz and 5 Ghz band
- USB 3.0 interface for optimum communication with the host computer
- Maximum PHY data rate:
    - Up to 173.3 Mbps using 20MHz bandwidth
    - Up to 400 Mbps using 40MHz bandwidth
    - Up to 866.7 Mpbs using 80MHz bandwidth
- IEEE 802.11e EDCA QoS Enhancement
- IEEE 802.11i security: Open, pre-shared key and pair-wise key authentication services plus TKIP/AES128 encryption
- IEEE 802.11h Spectrum and Transmit Power Management Extensions
- IEEE 802.11k Radio Resource Measurement to optimize network usage
- Wi-Fi Protected Setup via push button for easy network pairing

Supported Environment

- Desktop or Laptop with a USB 2.0/3.0 port
- Windows 7, 8, 8.1 or 10 Operating System

PRODUCT MODELS

USB-9100	ORiNOCO® USB-9100, MIMO 2x2, 802.11ac USB Adapter

INTERFACES

COMPUTER	USB 3.0
WIRELESS PROTOCOL	802.11 a/b/g/n/ac

RADIO & TX SPECS

FREQUENCY	2.400 – 2.484, 5.150 – 5.350, 5.470 - 5.825 GHz (Subject to Country Regulations)

	802.11ac			802.11n		802.11a/g	802.11b
MIMO	2x2			2x2		N/A	N/A
MODULATION	OFDM BPSK, QPSK, QAM16, QAM64, QAM 256			OFDM BPSK, QPSK, QAM16, QAM64		OFDM BPSK, QPSK, QAM16, QAM64	DSSS DBPSK, DQPSK and CCK
DATA RATE	Up to 866 Mbps			Up to 300 Mbps			1 to 11 Mbps
	80 MHz	40 MHz	20 MHz	40 MHz	20 MHz	20 MHz	20 MHz
TX POWER	MCS0: 15 dBm	MCS0: 16 dBm	MCS0: 17 dBm	MCS0: 16 dBm	MCS0: 17 dBm	6 Mbps: 15 dBm	1 Mbps: 18 dBm
	MCS9: 12 dBm	MCS9: 12 dBm	MCS8: 12 dBm	MCS7: 14 dBm	MCS7: 14 dBm	54 Mbps: 14 dBm	11 Mbps: 17 dBm
RX SENSITIVITY (BER=10^{-6})	MCS9: -51 dBm	MCS9: -54 dBm	MCS8: -57 dBm	MCS7: -61 dbm	MCS7: -64 dBm	54 Mbps: -65 dBm	11 Mbps: -72 dBm

ANTENNA

Two internal printed 3.9 dBi antennas

DRIVERS

- WiFi Protected Setup
- 802.11h Spectrum and Transmit Power Management Extensions
- 802.11k Radio Resource Measurement

QOS

802.11e Enhanced Distributed Channel Access

SECURITY

AUTHENTICATION	Enterprise/802.1x, Personal/ PSK (Pre Shared Key) or Open
802.1x Support	PEAP, LEAP, EAP-FAST, EAP-SIM, EAP-TTLS, EAP-AKA
ENCRYPTION	802.11i Wireless Security with AES-128, TKIP or WEP

THROUGHPUT

Up to 330 Mbps (11ac 80 MHz)

SPECIFIC ABSORPTION RATE

	2450 MHz – 250 mW	5200 MHz – 100 mW	5300 MHz – 100 mW	5500 MHz – 100 mW	5600 MHz – 100 mW	5800 MHz – 100 mW
SAR (1g) @ 10mm	12.7 W/kg	7.53 W/kg	7.78 W/kg	7.92 W/kg	8.15 W/kg	7.45 W/kg
SAR (10g) @ 10 mm	5.84 W/kg	2.11 W/kg	2.21 W/kg	2.21 W/kg	2.26 W/kg	2.08 W/kg

POWER CONSUMPTION

STANDBY: 173 mA / 5 VDC   OPERATING: 426 mA / 5 VDC

ENVIRONMENTAL SPECS

TEMPERATURE	STORAGE: -30 to +70 °C	OPERATING: 0 to +40 °C
HUMIDITY	STORAGE: 20 to 95 % non condensing	OPERATING : 20 to 95 % non condensing

PHYSICAL SPECS

DIMENSIONS (PACKAGED): 114 x 94 x 25 mm   DIMENSIONS (UNPACKAGED): 80 x 26 x 11 mm   WEIGHT (PACKAGED): 50 g   WEIGHT (UNPACKAGED): 15 g

PACKAGE CONTENTS

- USB 9100 802.11a/b/g/n/ac adapter with cap
- Quick Installation Guide

WARRANTY

One year