ORIGO

OWR1830AXG

AX1800 Wi-Fi 6 Gigabit Router

Wi-Fi 6 (802.11ax), 2.4/5GHz, 1x1000Base-T WAN, 3x1000Base-T LAN

OWR1830AXG is a dual-band AX1800 Wi-Fi 6 gigabit router with 1 1000Mbps WAN port and 3 1000Mbps LAN ports.

The ORIGO OWR1830AXG wireless router is designed to set up home networks with uninterrupted internet access with plans of up to 1000Mbps, high-speed dual-band Wi-Fi 6, support for IPTV in Ultra HD quality and parental control functions.

The Multi-WAN feature allows to configure multiple WAN ports and connect to different internet service providers. If the primary connection fails, the router will automatically switch to the backup one.

Wi-Fi operates in two frequency bands: with speeds of up to 1201Mbps in the 5GHz band and up to 574Mbps in the 2.4GHz band. Support for OFDMA and MU-MIMO technologies provides high speed and minimal latency when multiple devices are connected simultaneously.

The router is fully adapted to work with IPTV, supports the creation of a guest Wi-Fi network with WPA3 protection and parental control functionality with using a URL filter and the SkyDNS content filtering service.

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Key Features

- For internet plans with speeds up to 1000Mbps
- AX1800 Wi-Fi 6 with speeds of up to 1201Mbps in the 5GHz band and up to 574Mbps in the 2.4GHz band
- Dual-core 880MHz processor, 256MB RAM, 128MB Flash
- 1 Gigabit WAN port, 3 Gigabit LAN ports
- 4 omnidirectional 5dBi antennas for extensive Wi-Fi coverage
- MU-MIMO and OFDMA for simultaneous operation without lags or interruptions
- Airtime Fairness for improving overall Wi-Fi performance
- Multi-WAN for internet connection backup
- Smooth IPTV streaming in HD and Ultra HD quality
- Parental control functions

Specification

Hardware

Processor	• MT7621 (880MHz, dual core)
RAM	• 256MB, DDR3
Flash	• 128MB, NAND
Ports	• 1 10/100/1000BASE-T WAN port • 3 10/100/1000BASE-T LAN ports
LEDs	• SYS (Power) • 2.4 GHz Wi-Fi • 5 GHz Wi-Fi • WAN • LAN
Buttons	• RESET button to restore factory default settings and set up wireless connection
Antennas	• 4 external non-detachable omnidirectional 5dBi antennas
MIMO	• 2 x 2, MU-MIMO
Power Connector	• Power input connector (DC)
Mounting	• Desktop

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Wi-Fi Parameters

Standards	• IEEE 802.11ax • IEEE 802.11ac Wave 2 • IEEE 802.11a/b/g/n
Frequency Range	• 2400 ~ 2483.5MHz • 5150 ~ 5350MHz • 5650 ~ 5850MHz

Wireless Connection Rate	• 2.4GHz
	  - 11ax: up to 574Mbps
	  - 11n: up to 300Mbps
	  - 11g: up to 54Mbps
	  - 11b: up to 11Mbps
	• 5GHz
	  - 11ax: up to 1201Mbps
	  - 11ac: up to 867Mbps
	  - 11n: up to 300Mbps
	  - 11a: up to 54Mbps

Wireless Connection Security	• WPA/WPA2 (Personal/Enterprise) • WPA3 (Personal) • MAC filter • WPS (PBC/PIN)
Advanced Functions	• WMM (Wi-Fi QoS) • Information on connected Wi-Fi clients • Advanced settings • Guest Wi-Fi / support of MBSSID • Periodic scan of channels, automatic switch to least loaded channel • Support of 2.4GHz/5GHz TX Beamforming • Autonegotiation of channel bandwidth in accordance with environment conditions (20/40 Coexistence) • Support of STBC • CoovaChilli authentication portal • Support of OFDMA technology • Support of TWT technology • Support of Airtime Fairness

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Transmitter Output Power	• Less than 20dBm (100mW)
Receiver Sensitivity	• 2.4GHz
	- 11b (11Mbps): -87dBm
	- 11g (54Mbps): -75dBm
	- 11n (HT20_MCS0): -91dBm
	- 11n (HT20_MCS7): -72dBm
	- 11n (HT40_MCS0): -87dBm
	- 11n (HT40_MCS7): -70dBm
	• 5GHz
	- 11a: -74dBm
	- 11n (HT20_MCS0): -89dBm
	- 11n (HT20_MCS7): -69dBm
	- 11n (HT40_MCS0): -85dBm
	- 11n (HT40_MCS7): -66dBm
	- 11ac (VHT20_MCS0): -90dBm
	- 11ac (VHT20_MCS8): -67dBm
	- 11ac (VHT40_MCS0): -89dBm
	- 11ac (VHT40_MCS9): -62dBm
	- 11ac (VHT80_MCS0): -86dBm
	- 11ac (VHT80_MCS9): -61dBm

Software

Operating Modes	• Router
	• Access point
	• Wi-Fi client
	• Wi-Fi repeater
	• WISP repeater
WAN Connection Types	• PPPoE
	• IPv6 PPPoE
	• PPPoE Dual Stack
	• Static IPv4 / Dynamic IPv4
	• Static IPv6 / Dynamic IPv6
	• PPPoE + Static IP (PPPoE Dual Access)
	• PPPoE + Dynamic IP (PPPoE Dual Access)
	• PPTP/L2TP + Static IP
	• PPTP/L2TP + Dynamic IP

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	• L2TP Dual Stack
	• 6in4
	• 6to4
	• 6rd
Network Functions	• DHCP server/relay
	• Advanced configuration of built-in DHCP server
	• Stateful/Stateless mode for IPv6 address assignment, IPv6 prefix delegation
	• Automatic obtainment of LAN IP address (for access point/repeater/client modes)
	• DNS relay
	• Dynamic DNS
	• Static IPv4/IPv6 routing
	• RIP
	• IGMP/MLD Proxy
	• Support of UPnP
	• Support of VLAN
	• WAN ping respond
	• Support of SIP ALG
	• Support of RTSP
	• WAN failover
	• LAN/WAN conversion
	• Multi-WAN support
	• Autonegotiation of speed, duplex mode, and flow control / Manual speed and duplex mode setup for each Ethernet port
	• Built-in UDPXY application
	• Equal load distribution while using several WAN connections (traffic balancing)
	• Support of VRRP
	• Port mirroring
	• Wake-on-LAN support

Firewall	• Network Address Translation (NAT) • Stateful Packet Inspection (SPI) • IPv4/IPv6 filter • MAC filter • URL filter • Ad blocking function • DMZ • Virtual servers • Built-in SkyDNS web content filtering service

VPN	• IPsec/PPTP/L2TP/PPPoE pass-through
	• PPTP/L2TP servers
	• PPTP/L2TP tunnels
	• L2TP over IPsec client
	• GRE/EoGRE/EoIP/IPIP tunnels
	• IPsec tunnels
	  - Transport/Tunnel mode
	  - IKEv1/IKEv2 support
	  - DES encryption
	  - NAT Traversal
	  - Support of DPD (Keep-alive for VPN tunnels)

Management and Monitoring	• Local and remote access to settings through SSH/TELNET/WEB (HTTP/HTTPS) • Web-based interface for configuration and management • Notification on connection problems and auto redirect to settings • Firmware update via web-based interface • Automatic notification on new firmware version • Saving/restoring configuration to/from file • Support of logging to remote host • Automatic synchronization of system time with NTP server and manual time/date setup • Ping utility • Traceroute utility • TR-069 client • SNMP agent • Schedules for rules and settings of firewall, automatic reboot, and enabling/disabling wireless network and Wi-Fi filter • Automatic upload of configuration file from server of internet

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	service provider (Auto Provision) • Configuration of action for hardware buttons

Physical Parameters

Device Dimensions (L x W x H)	• 196 x 125 x 31 mm
Device Weight	• 240 g
Package Dimensions	• 26.5 x 25.5 x 4.2 cm

Operating Conditions

Power	• Output: 12V DC, 1.5A
Temperature	• Operating: from 0 to 40 °C • Storage: from -10 to 70 °C
Humidity	• Operating: from 10% to 90% • Storage: from 5% to 90%

Package Contents

Package Contents	• Router OWR1830AXG • Power adapter • Ethernet cable • Quick Installation Guide

Order Info

OWR1830AXG	AX1800 Wi-Fi 6 Router, 1000Base-T WAN, 3x1000Base-T LAN