OWR1230ACG

AC1200 Wave 2 Wi-Fi Gigabit Router

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

LAN/WAN Conversion, WAN Failover

You can use any Ethernet port of the router as LAN or WAN port. The new-generation firmware supports assigning several WAN ports, for example, in order to configure the primary and backup WAN connection of different ISPs.

Wireless Interface

Using OWR1230ACG, you are able to quickly create a high-speed wireless network at home or in your office, which lets computers and mobile devices access the Internet virtually anywhere (within the operational range of your wireless network). Simultaneous activity of 2.4GHz band and 5GHz band allows performing a wide range of tasks. The router can operate as a base station for connecting wireless devices of the standards 802.11a, 802.11b, 802.11g, 802.11n, and 802.11ac (at the wireless connection rate up to 1167Mbps).

Secure Wireless Connection

The router supports multiple functions for the wireless interface: several security standards (WEP, WPA/WPA2/WPA3), MAC address filtering, WPS, WMM.

Advanced Capabilities of Wireless Network

Multi-user MIMO technology allows to distribute the router's resources to let multiple wireless clients use the Wi-Fi network efficiently, keeping high rates for HD media streaming, lag-free gaming, and fast transfer of large files.

Transmit Beamforming technology allows to flexibly change the antennas' radiation pattern and to redistribute the signal directly to wireless devices connected to the router.

Support of guest Wi-Fi network allows you to create a separate wireless network with individual security settings. Devices connected to the guest network will be able to access the Internet, but will be isolated from the devices and resources of the router's LAN.

3-port Switch

The built-in 3-port switch enables you to connect Ethernet-enabled computers, game consoles, and other devices to your network.

Security

OWR1230ACG includes a built-in firewall. The advanced security functions minimize threats of hacker attacks, prevent unwanted intrusions to your network, and block access to unwanted websites for users of your LAN.

The SSH protocol support provides more secure remote configuration and management of the router due to encryption of all transmitted traffic, including passwords.

The router supports multiple types of secure VPN connection tunnels: IPsec (IKEv1/IKEv2), L2TP over IPsec, PPTP/L2TP, GRE, IPIP, EoGRE, EoIP, OpenVPN, and WireGuard tunnels.

The router also supports the SkyDNS web content filtering service, which provides more settings and opportunities for safer Internet experience for home users of all ages and for professional activities of corporate users.

Now the schedules are also implemented; they can be applied to the rules and settings of the firewall and used to reboot the router at the specified time or every specified time period and to enable/disable the wireless network and the Wi-Fi filter.

The new ad blocking function effectively blocks advertisements which appear during web surfing.

Easy configuration and update

You can configure the settings of OWR1230ACG via the user-friendly web-based interface (the interface is available in two languages – in Russian and in English).

The configuration wizard allows you to quickly switch OWR1230ACG to one of the following modes: router (for connection to a wired or wireless ISP), access point, repeater, or client, and then configure all needed setting for operation in the selected mode in several simple steps.

You can simply update the firmware: the router itself finds approved firmware on update server and notifies when ready to install it.

Hardware	
Processor	· MT7621DAT (880MHz, 2 cores)
RAM	· 128MB, DDR3
Flash	· 128MB, NAND
Ports	· 10/100/1000BASE-T WAN port · 3 10/100/1000BASE-T LAN ports
LEDs	· Power · WAN · 2.4GHz Wi-Fi · 5GHz Wi-Fi · WPS
Buttons	· ON/OFF button to power on/power off · RESET button to restore factory default settings · WPS button to set up wireless connection and to enable/disable wireless network
Antenna	· 4 external non-detachable antennas (5dBi)
MIMO	· 2 x 2, MU-MIMO
Power connector	· Power input connector (DC)
Mounting	· Desktop
Wi-Fi Parameters	
Standards	· IEEE 802.11ac Wave 2 · IEEE 802.11a/b/g/n · IEEE 802.11k/v
Frequency range	· 2400 ~ 2483.5MHz · 5150 ~ 5350MHz · 5650 ~ 5850MHz
Wireless connection rate	· 2.4GHz - 11n: up to 300Mbps - 11g: up to 54Mbps - 11b: up to 11Mbps · 5GHz - 11ac: up to 867Mbps - 11n: up to 300Mbps - 11a: up to 54Mbps
Wireless connection security	· WEP · 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 5 GHz TX Beamforming · Autonegotiation of channel bandwidth in accordance with environment conditions (20/40 Coexistence) · Support of STBC · CoovaChilli authentication portal
Transmitter output power	· Less than 20dBm (100mW)

Receiver sensitivity	· 2.4GHz - 11b (11Mbps): -87dBm - 11g (54Mbps): -75dBm - 11n (HT20_MCS0): -91dBm - 11n (HT20_MCS7): -73dBm - 11n (HT40_MCS0): -87dBm - 11n (HT40_MCS7): -70dBm · 5GHz - 11a: -74 dBm - 11n (HT20_MCS0): -89dBm - 11n (HT20_MCS7): -70dBm - 11n (HT40_MCS0): -86dBm - 11n (HT40_MCS7): -67dBm - 11ac (VHT20_MCS0): -90dBm - 11ac (VHT20_MCS8): -68dBm - 11ac (VHT40_MCS0): -89dBm - 11ac (VHT40_MCS9): -63dBm - 11ac (VHT80_MCS0): -86dBm - 11ac (VHT80_MCS9): -61dBm
Modulation schemes	· 802.11a: BPSK, QPSK, 16QAM, 64QAM with OFDM · 802.11b: DQPSK, DBPSK, DSSS, CCK · 802.11g: BPSK, QPSK, 16QAM, 64QAM with OFDM · 802.11n: BPSK, QPSK, 16QAM, 64QAM with OFDM · 802.11ac: BPSK, QPSK, 16QAM, 64QAM, up to 256QAM with OFDM

Software

Operation 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 · L2TP Dual Stack · IPIP6 (DSLite mode) · 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 · IGMP/MLD Proxy · RIP · 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 functions	· 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 · OpenVPN server/tunnels with PKI option (certificates/keys) · L2TP over IPsec client · WireGuard tunnels · GRE/EoGRE/EoIP/IPIP tunnels · IPsec tunnels Transport/Tunnel mode IKEv1/IKEv2 support DES/3DES/AES/BLOWFISH/CAMELLIA/SERPENT/TWOFISH 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) · Bilingual web-based interface for configuration and management (Russian/English) · 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 ISP's server (Auto Provision) · Configuration of action for hardware buttons
Physical Parameters	
Device dimensions (L x W x H)	· 197 x 141 x 25mm
Weight	· 260g
Package dimensions	· 27.1 x 24.7 x 3.9cm
Operating Environment	
Power	· Output: 12V DC, 1A
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	
Delivery package	· Router OWR1230ACG · Power adapter · Ethernet cable · Quick Installation Guide