

R220 OpenWrt 4G/3G Router

Compact, Industrial Robust construction, Versatile Interface

WLINK WL-R220 4G/3G OpenWrt router is an M2M/IoT mobile broadband router which can work on 4G or 3G cellular networks to provide reliable, secure and high-speed wireless connectivity for remote management, telemetry, condition monitoring, CCTV, ATMs, vending machine and Using one of the world's leading MIPS schemes, the CPU has a base frequency of 580 MHz supports 802.11n with speeds up to 300Mbps, Perfectly compatible OpenWrt third parties firmware, meet customer secondary development.



What is OpenWrt?

OpenWrt is a Linux-based open-source firmware for routers and other embedded devices. It's designed to be flexible, lightweight, and configurable, and provides a lot of features that you wouldn't otherwise find on a typical router firmware.

What can OpenWrt do?

As a distribution for Router, it offers a built-in package manager that allows you to install package from a software repository. It can be used for any purpose that an embedded Linux system can serve, including functioning as an SSH server, VPN, traffic shaping system and so on.

Why use OpenWrt?

There are many reasons why you might want to use OpenWrt on your router. One of the main benefits is that it gives you more control over your router's settings and allows you to customize it to better suit your needs. For example, you can use OpenWrt to install custom software packages, set up VPNs or configure advanced routing options. Another benefit of OpenWrt is that it's high secure. The open-source nature of the software means that it's regularly audited by a community of Linux security experts, which can help to identify and fix any vulnerabilities. Finally, OpenWrt is also very lightweight and efficient, which means that it can run on older or less powerful hardware. This can be especially useful if you have an older router that you want to keep using. Overall, if you're looking for a more customizable, secure, and efficient router firmware, then OpenWrt is a great option to consider.



Common Plugins and Features of OpenWrt

- Luci
- SQM
- Unbound
- Samba
- MiniDLNA
- Adblock
- WireGuard
- OpenVPN
- FTP/SFTP
- FTP/SFTP

Key Features

- **Powerful Performance:** Equipped with a high-efficiency MIPS-based CPU running at 580 MHz, ensuring robust processing capabilities for demanding applications.
- **High-Speed Connectivity:** Supports 4G LTE Cat4 or Cat6 networks, and 802.11n Wi-Fi with speeds up to 300Mbps, enabling seamless data transmission.
- **OpenWrt Compatibility:** Fully compatible with OpenWrt third-party firmware, offering unparalleled flexibility for customization and secondary development to meet specific customer needs.
- **Industrial-Grade Design:** Built to withstand harsh environments, ensuring reliable operation in industrial and commercial settings.

Customization and Flexibility

Unlike traditional firmware that includes every possible feature, OpenWrt provides a minimal base with support for add-on packages. This approach allows users to:

- Tailor the router's functionality by adding or removing packages.
- Optimize performance by eliminating unnecessary features.
- Focus on specific development needs without the overhead of a full firmware release.

The WL-R220 is perfect for users seeking a drop-in replacement firmware with the ability to customize and fine-tune their network solutions.

Ideal For

- Industrial automation and remote monitoring.
- Secure wireless connectivity for ATM, vending machines, and CCTV systems.
- Custom IoT applications requiring flexible, scalable solutions.

Specification

Optional Supports Mobile Network	<ul style="list-style-type: none"> • FDD-LTE / TDD-LTE • DC-HSPA+/HSPA+/HSPA/HSDPA/WCDMA/UMTS • EDGE/GPRS • CDMA2000 EVDO/CDMA 1X 	LED instruction	<ul style="list-style-type: none"> • PWR • WLAN • ERR • SIGNAL • LAN (LAN1~LAN2)
Interface	<ul style="list-style-type: none"> • 1 x 10/100Mb LAN, 1x WAN/LAN • 1xLAN, 1x WAN/LAN (10/100 Mbps) • 1xRS-232 console • 2x GPIO Input, 1xGPIO Output • 2x SMA-K, 2xSMA-RP antenna connectors • 2x Standard SIM/R-UIM Slot • 1x power connector 	Other	<ul style="list-style-type: none"> • Dimension: 102mm x 100mm x 42mm (not including antenna) • Weight: 350g • Operation temperature: -30~+70 degree • Storage temperature: -40~+85 degree • Relative humidity: <95% (non-condensing) • Guarantee: one year
Power supply	<ul style="list-style-type: none"> • 7.5 - 32VDC 	Ethernet Standard	<ul style="list-style-type: none"> • IEEE 802.3 • IEEE 802.3u
Approval	<ul style="list-style-type: none"> • CE • RoHS • CCC 	Power Consumption	<ul style="list-style-type: none"> • Idle: 213mA@+12VDC • Single Module Communications: 265mA@+12VDC
Standard	<ul style="list-style-type: none"> • EN 300 328 v 1.7.1 (2016-11) • EN 301 489-17 • EN 301 908-1 • EN 55024:2015 • EN 55032:2015 • EN 61000-3-3:2013 	<ul style="list-style-type: none"> • EN 301 489-1 • EN 301 489-52 • EN 301 908-2/13, • EN 60950-1, • EN 61000-3-2:2014 • EN 62311:2008 	

Partial Order Number List

Model	Region	4G	3G	Interface	DL	UL	SIM	WiFi	GPS
WL-R220LA-d	Asia Europe Africa	LTE-FDD: B1/3/5/7/8/ 20/28 LTE-TDD: B38/40/41	B1/5/8	1x LAN 1xWAN/LAN 1x RS232 3x I/O	FDD 150M TDD 130M	FDD 50M TDD 35M	Two	✓	
WL-R220LFX-d	Asia Europe Africa	LTE-FDD: B1/3/7/8/20/28A LTE-TDD: B38/40/41	B1/8	1x LAN 1xWAN/LAN 1x RS232 3x I/O	FDD 150M TDD 130M	FDD 50M TDD 35M	Two	✓	
WL-R220LFX-g									✓
WL-R220LF-d	Asia Europe Africa	LTE-FDD: B1/3/5/7/8/20 LTE-TDD: B38/40/41	B1/5/8	1x LAN 1xWAN/LAN 1x RS232 3x I/O	FDD 150M TDD 130M	FDD 50M TDD 35M	Two	✓	
WL-R220LF-g									✓
WL-R220LA1-d	Latin America Australia New Zealand	LTE-FDD: B1/2/3/4/5/7/8/ 28/66 LTE-TDD: B40	B1/2/4/5/8	1x LAN 1xWAN/LAN 1x RS232 3x I/O	FDD 150M TDD 130M	FDD 50M TDD 35M	Two	✓	
WL-R220LF1-d	Latin America Australia New Zealand	LTE-FDD: B1/2/3/4/5/7/8/28 LTE-TDD: B40	B1/2/4/5/8	1x LAN 1xWAN/LAN 1x RS232 3x I/O	FDD 150M TDD 130M	FDD 50M TDD 35M	Two	✓	
WL-R220LF1-g									✓
WL-R220LF2-d	North America FirstNet	LTE-FDD: B2/4/5/12/13/ 14/66/71	B2/4/5	1x LAN 1xWAN/LAN 1x RS232 3x I/O	FDD 150M	FDD 50M	Two	✓	
WL-R220LF2-g									✓
WL-R220LF3-d	Japan	LTE-FDD: B1/3/8/18/19/ 26/41	B1/6/8/19	1x LAN 1xWAN/LAN 1x RS232 3x I/O	FDD 150M	FDD 50M	Two	✓	
WL-R220LF3-g									✓
WL-R220LG-d	Global	LTE-FDD: B1/2/3/4/5/7/8/ 12/13/18/19/20/25/26/28 LTE-TDD: B38/39/40/41	B1/2/4/5/ 6/8/19	1x LAN 1xWAN/LAN 1x RS232 3x I/O	FDD 150M TDD 130M	FDD 50M TDD 35M	Two	✓	
WL-R220LG-g									✓
WL-R220H2-d	Global	N/A	B1/5/8	1x LAN 1xWAN/LAN 1x RS232 3x I/O	14M	5.76M	Two	✓	
WL-R220H2-g									✓

Note:

1. If request other frequency band model, please consult WLink sales
2. Please specify when order if request other optional features
3. The above list includes partial of WLINK models only, please consult WLink sales or distributor if can't find a suitable model from the above list