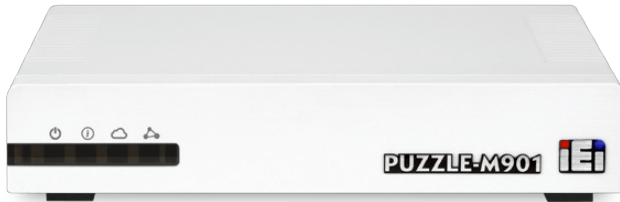


# PUZZLE-M901

OpenWrt Network Appliance with Marvell® CN9130 Processor, up to 6 x2.5 GbE on Board with 1 x eMMC 4GB



## Features

- » Marvell® CN9130 quad-core Armv8 Cortex-A72 @ up to 2200 MHz
- » Onboard 4GB DDR4
- » Six 2.5GbE RJ-45 ports (three via Marvell CN9130; three via Marvell 88F8215)
- » 4 GB eMMC; one console port (pin-header); one reset button
- » LED indicators: status/power & WAN/LAN interface indicator
- » Pre-installed OpenWrt

## Specifications

|                             |  |
|-----------------------------|--|
| Form Factor                 |  |
| Form Factor                 | Desktop  |
| System                      |  |
| CPU                         | Marvell® CN9130 quad-core Armv8 Cortex-A72 @ up to 2200 MHz  |
| Memory                      | System: 4G   |
| Cooling method / System Fan | Active Fan   |
| Physical Characteristics    |  |
| Dimensions (LxWxH) (mm)     | 166.4 x 145.7 x 34   |
| Storage                     |  |
| Storage                     | 1 x M.2(NGFF) : 2242 M key M.2 PCIe Gen. 3 x2<br>1 x eMMC : onboard 4 GB   |
| I/O Interface               |  |
| Ethernet                    | 6 x LAN :<br>1 x 2.5GbE LAN integrated in CPU via PHY Aquantia AQR112R<br>1 x 2.5GbE LAN integrated in CPU via PHY Aquantia AQR112C<br>1 x 2.5GbE LAN integrated in CPU via PHY Aquantia AQR112<br>1 x 2.5GbE LAN via Marvell 88F8215 (PHY: Aquantia AQR112R)<br>1 x 2.5GbE LAN via Marvell 88F8215 (PHY: Aquantia AQR112C)<br>1 x 2.5GbE LAN via Marvell 88F8215 (PHY: Aquantia AQR112) |
| I/O Interface               | 1 x External USB 3.2 Gen1x1  |
| Environment                 |  |
| Operating Temperature       | 0°C ~ 40°C (32°F ~ 104°F)  |
| Storage Temperature         | -20°C ~ 75°C (-4°F ~ 167°F)  |
| Humidity                    | 5~95% non-condensing, wet bulb: 27 °C  |
| Certifications              |  |
| Safety & EMC                | CE/FCC/BSMI (BSMI safety)/VCCI, LVD  |
| OS Support                  |  |
| OS Support                  | OpenWrt  |

## Ordering Information

PUZZLE-M902-CN1-PF0 Desktop Network Appliance with Marvell CN9130 Processor ,6 x 2.5GbE on Board 4GB eMMC & 1x M.2 slot, RoHS.

## Packing List

|                |                   |
|----------------|-------------------|
| 1 x Power cord | 1 x Power adapter |
|----------------|-------------------|

## Why You Need Software Defined Router?

High Reliability, Performance and Availability



**HIGH SCALABILITY**  
Rich open resource services to achieve any requirement



**SUPER SPEED**  
Design with 2.5GbE and 10GbE ports for faster package transfer



**FASTER TIME TO MARKET**  
Deploy network applications and services faster by leveraging open software packages

## Get Your Office Ready for New Gen. Software Defined Router

The growing number of connected personal and IoT devices has led to an overall increase in network density. The PUZZLE-M902 is IEI's latest product series – Software Defined Router, which is pre-installed with OpenWrt and features high speed and high flexibility to optimize your network performance.

This series is integrated with 2.5GbE and 10GbE ports and the interfaces can be defined with various combination to meet your demands. Moreover, its function can also be expanded by open source applications supported in the OpenWrt community. It is ideally suited for a wide range of applications, such as SOHO and SMB networking infrastructure.



## High-end Arm-based Platform with Marvell Quad-core SoC

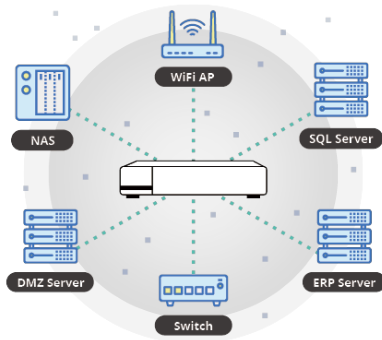
The Marvell CN9130 is a quad-core Armv8 Cortex-A72 Flexible High-speed Network Processor offers a complete function and acceleration for networking and security applications. It can accelerate the packet processing on NAT, QoS and packet filtering, any offload the processor on multiple IPsec/SSL VPN tunneling, NAT, QoS and packet filtering, and offload the processor on multiple IPsec/SSL VPN tunneling.

High computing with quad-core SoC

tunneling



Accelerate NAT, QoS, packet filtering, and offload IPsec/SSL VPN



**6 x 2.5 GbE**  
**3 x 10 GbE**

Built stability for multi-device connections

Super speed for package transfer

## Customize Your Network with OpenWrt

The hottest open source project, OpenWrt, which is based on Linux-based embedded operating system and used on embedded devices to route network traffic. It uses the command line interface (ash shell) or the web interface (LuCI) to configure OpenWrt. Approximately 3,500 optional software packages can be installed through the opkg package management system. It provides detailed possibilities to configure common network-related functions, such as IPv4, IPv6, DNS, DHCP, VPN, shadowsocks, DLNA, routing, Dynamic DNS, firewall, NAT, port forwarding, file sharing via SAMBA, NFS, FTP, SFTP and MQ Telemetry Transport through Mosquitto.



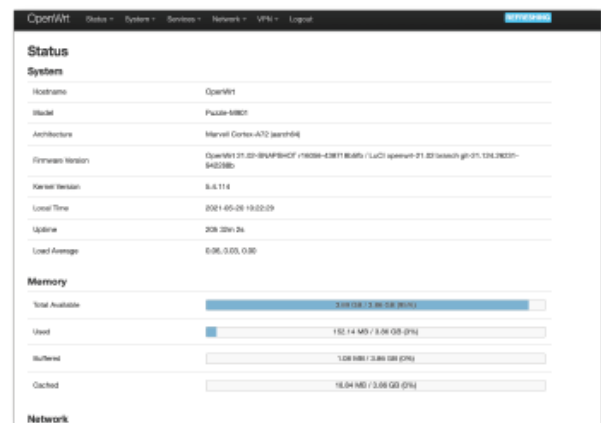
**3,500**

The hottest open source project for router

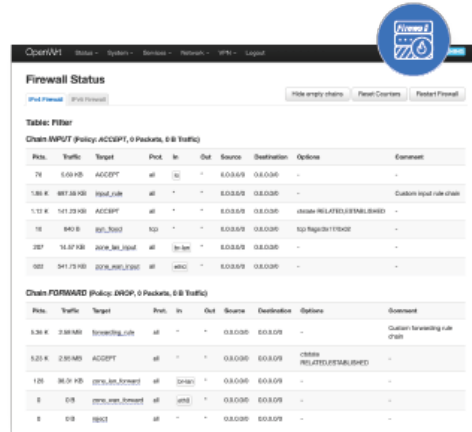
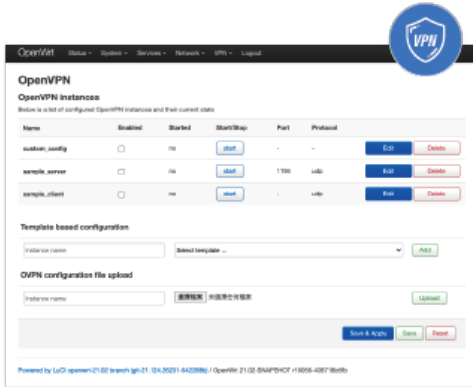
Various software packages you can have

## Simple and Visible Network Operation

Powered by OpenWrt, the PUZZLE-M902 provides a user-friendly web interface, a clear dashboard and port indicators to help you handle daily network management tasks. Users can not only efficiently manage all connected wires through OpenWrt OS in real time, but also configure firewall, VPN, security and advanced network functions.



There are multiple packages available in the OpenWrt package repository and designed with clear user interface to support IT developer for installing and deploying the security function of network. OpenVPN, a virtual private network (VPN), and Firewall3 (fw3) which uses netfilter/iptables rule builder for firewall applications, are two of the most popular packages for creating high reliable network security.



## Connection Configuration



## Dimensions (Unit: mm)

