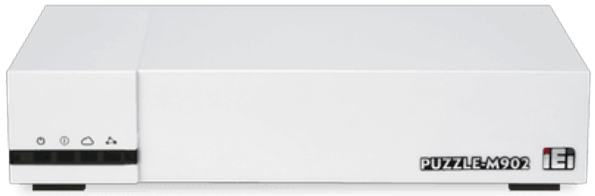
PUZZLE-M902

OpenWrt Network Appliance with Marvell® CN9130 Processor, up to three 10GbE, six 2.5GbE with 4GB eMMC



Features

» Marvell® CN9130 quad-core Armv8 Cortex-A72 @ up to 2200 MHz

» Six 2.5GbE RJ-45 ports (two via Marvell CN9130; four via Marvell 88F8215)

» Three 10GbE RJ-45 ports (one via Marvell CN9130; two via Marvell 88F8215)

» 4 GB eMMC; one console port (pin-header); one reset button

» LED indicators: status/power & WAN/LAN interface indicator

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	1 system fan
Physical Characteristics	
Dimensions (LxWxH) (mm)	226 x140 x 50.5
Storage	
Storage	1 x M.2(NGFF) : 2242/2280 M Key M.2 PCIe Gen. 3 x1
	1 x eMMC : onboard 4 GB
I/O Interface	
Ethernet	9 x LAN :
	2 x 2.5GbE LAN integrated in CPU via PHY Aquantia AQR112R
	4 x 2.5GbE LAN via Marvell 88F8215 (PHY: Aquantia AQR112R)
	1 x 10GbE LAN integrated in CPU via PHY Aquantia AQR113
	2 x 10GbE LAN via Marvell 88F8215 (PHY: Aquantia AQR113)
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 Compatible	
OS Compatible	OpenWrt

Ordering Information

PUZZLE-M902-CN1-R10	Desktop Network Appliance with Marvell CN9130 Processor ,6 x 2.5GbE and 3 x10 GbE 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

system-on-chip (SoC). The high-performance processor offers a complete function and acceleration for networking and security applications. It can accelerate the packet processing for NAT, QoS and packet filtering, and offload the processor on multiple IPSec/SSL VPN tunneling.

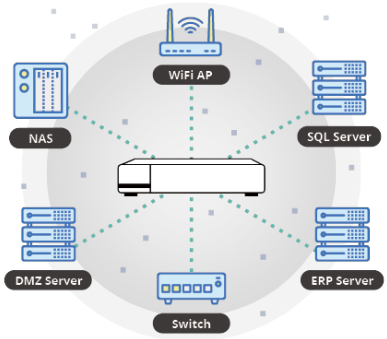
High computing with quad-core SoC

Accelerate NAT, QoS, packet filtering, and offload IPSec/ SSL VPN tunneling

The Marvell CN9130 is a quad-core Armv8 Cortex-A72

Flexible High-speed Network Deployment

The Marvell CN9130 is a quad-core Armv8 Cortex-A72 system-on-chip (SoC). The high-performance processor offers a complete function and acceleration for networking and security applications. It can accelerate the packet processing for NAT, QoS and packet filtering, and offload the processor on multiple IPSec/SSL VPN tunneling.



Built stability for multi-device connections

6 x 2.5 GbE
3 x 10 GbE

Super speed for package transfer

Customize Your Network with OpenWrt

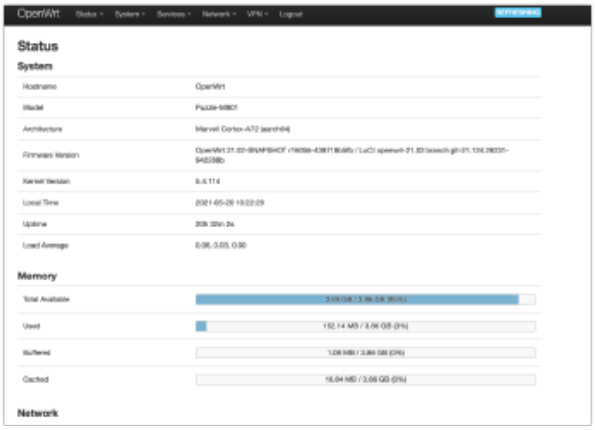
The hottest open source project, OpenWrt, which is based on Linux-based embedded operating system and used on embedded devices to route network traffic. It uses the command line interface (ash shell) or the web interface (LuCI) to configure OpenWrt. Approximately 3,500 optional software packages can 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.

The hottest open source project for router

3,500

Various software packages you can have

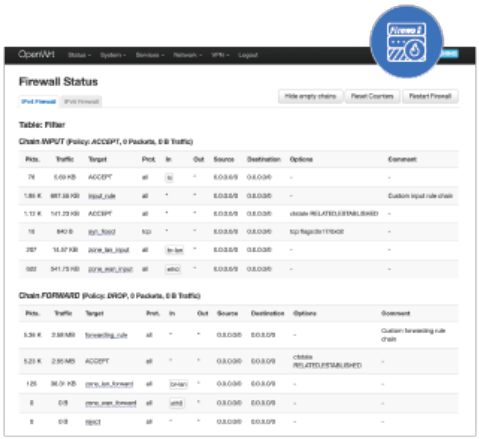
Simple and Visible Network Operation

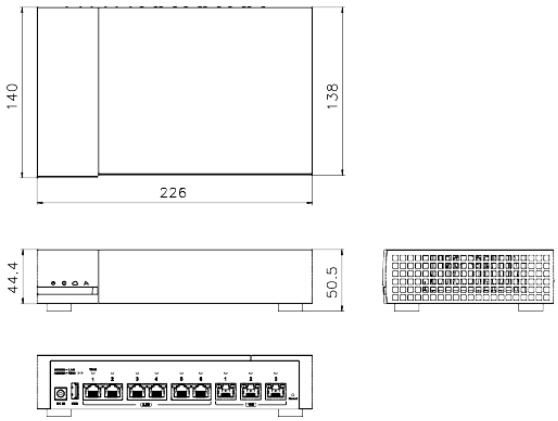


Make Security Configuration Easier than Ever

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 Firewall 3 (fw3) which uses netfilter/iptable rule builder for firewall applications, are two of the most popular packages for creating high reliable network security.



Connection Configuration

Dimensions (Unit: mm)