

WD-4020R



WD-4020R is a dual core CPU router that integrates multiple functions with metal housing along with 4G CAT4 LTE support. It supports dual band Wi-Fi which comply with IEEE 802.11ac/b/g/n MIMO standard, The Wi-Fi data rate is up to 866 Mbps with built-in mini-PCI-E interface

It supports one 4G modem and dual SIM card in Active-Standby mode, FDD-LTE/TDD-LTE worldwide full frequencies up to 300 Mbps 4G LTE download speed.

It provides more processing performance, richer interfaces and higher network connection speed than ordinary industrial routers. This product is suitable for different application types and scenarios, such as intelligent parking lot, intelligent transportation, smart electricity grids, supply chain automation, Intelligent data collection, intelligent building, vending machine, video surveillance etc.

HARDWARE SPECIFICATIONS

CPU	MIPS Dual Core 880 MHz
FLASH	32 / 64 MB
DDR RAM	256 / 512 MB
2.4G WiFi	IEEE 802.11b/g/n, 300 Mbps
5.8G WiFi	IEEE 802.11ac, 866 Mbps
Ethernet	5 x RJ45 ports, 10/100/1000 Mbps
SIM Slot	2 Active-Standby
USB	USB 2.0
LEDs	SYS,4GA, 4GB, 2.4G, 5.8G, WAN, LAN1, LAN2, LAN3, LAN4
Antennas	2 x 2.4G WiFi, 2 x 5.8G WiFi, 2 x 4G
Reset	Factory reset button
Casing material	High Quality Aluminum
Dimensions (L x W x H)	200 x 125 x 30mm
Mounting options	Industrial screw mounting
Power Input	12V 2A
Max Power Consumption	< 24W

ETHERNET

WAN	1 X WAN port 10/100/1000 Mbps, compliance with IEEE 802.3, IEEE 802.3u, 802.3az standards, supports auto MDI/MDIX crossover
LAN	4 x LAN ports, 10/100/1000 Mbps, compliance with IEEE 802.3, IEEE 802.3u, 802.3az standards, supports auto MDI/MDIX

MONITORING AND MANAGEMENT

WEB UI	HTTP/HTTPS, status, configuration, FW update, CLI, troubleshoot, event log, system log, Kernel log
SSH	SSH (v1, v2)
SMS	SMS status
WD-WAN	Compatible
SNMP	SNMPv1/2/3

OPERATING ENVIRONMENT

Operating Temperature	- 40°C ~ +70°C
Operating Humidity	10 % to 95 % non-condensing
Environmental Compliance	RoHs Compliant

FIRMWARE SPECIFICATIONS

OVERVIEW

System Details
Router Memory Utilization Details
Connected WAN Link Details
DHCP leases (IPv4 / IPv6)
Wireless Interface Details & Connected Hosts
Load Balancing Interfaces With Status

ADMINISTRATION

Router Password
SSH Access (Interface Wise)
SSH Keys (Pre-shared key, digital certificates)

SYSTEM

Local Time
Host Name
Discriptions
Time Zone
Syslog Server Configuration
NTP Server / Client Configuration
SNMP V 1/2/3

SERVICES

User Management
URL Filtering
Web Filtering
Domain Filtering
Content Filtering
Wi-Fi Captive Portal
High Availability (VRRP)
CLI Interface
Custom Reboot (IP Tracking Based)
Web Server Configuration

WIRELESS

Dual Band (2.4 GHz & 5.8 GHz)
Custom Wi-Fi Channels
Wi-Fi Security (WPA2-Enterprise-PEAP, WPA2-PSK, WPA-PSK, WEP)
MAC Filtering
Advanced Setting

LOAD BALANCING

Load Balanced Interfaces Status
Load Balancing Details
Load Balancing Diagnostics
Policy / Rule Based Load Balancing
Parameter / Quality Based Failover
WAN + SIM Load Balancing

ROUTES

ARP Details
Active IPv4 / IPv6 Routes
IPv6 Neighbours

REAL TIMES GRAPHS

CPU Load
Interface Wise Traffic
Wireless Traffic (Radio Wise)
Connections - TCP / UDP Sockets

SYSTEM LOGS

System Log Of Last 24 Hours

INTERFACES

Static
DHCP Client (IPv4 / IPv6)
VX-LAN (IPv4 / IPv6)
PPPoE
PPP
Bridge
VTI Tunnel
Loopback
LTE
Custom Interface (Aliase Interface)

DYNAMIC ROUTING

BGP
OSPF
ISIS
RIP
RIPng

FIRMWARE SPECIFICATIONS

FIREWALL

Stateful Zone Based Firewall

Port Forwarding

Traffic Rules (Filter Table)

NAT / PAT

Mangle / Raw Rules

Input / Output / Pre-Routing / Post-Routing / Forward Chain Rules

DDoS Protection (SYN flood protection, SSH attack prevention, HTTP/HTTPS attack prevention), port scan prevention (SYN-FIN, SYN-RST, X-mas, NULL flags, FIN scan attacks)

VPN

IPSec (IKEv1 / IKEv2)

L2tp (Server / Client)

PPTP (Server / Client)

Open VPN (Server / Client)

Wireguard

Open Connect VPN

Any Connect VPN

GRE Tunnel (IPv4 / IPv6)

GRETAP (IPv4 / IPv6)

IPSec Tracking For Failover

DHCP & DNS

DHCP Server Configuration

DNS Server Configuration

Static Lease Configuration

TFTP Server Configuration

Client Hostname Configuration

DHCP Relay Configuration

SIM SWITCHING

Automatic (Based on IP Tracking)

Time Based SIM Switching

Jitter Based SIM Switching

Manual SIM Switching

Automatic (Based on Signal Parameters
- RSSI / RSRQ / RSRP / SINR)

STATIC ROUTING

Static IPv4 / IPv6 Routing

SWITCH

V-LANs (Port & Tagging Based)

QoS

Traffic Classification / Prioritization
(Interface / Port Based)

DIAGNOSTICS

Ping

Traceroute

Nslookup

DATA ANALYTICS

Traffic Distribution

Application Protocol Wise Usage

SMART QUEUE MANAGEMENT

Bandwidth Distribution
(Interface / V-LAN Based)

BACK-UP / FLASH FIRMWARE

Firmware Upgrade

Configuration Backup

Configuration Restore

REBOOT

Router Reboot

SMS Control

Device Reboot

SIM Switching

Active SIM status

SIM INFO

Information Of Connected SIM
