



## Hardware Features

- ❖ 1U frame
- ❖ Intel® Baytrail™ J1800 dual core 2.41GHz low power CPU
- ❖ 6\*Intel® I211AT Gigabit RJ45 ports
- ❖ Build-in 75W-100W Industrial use power supply
- ❖ Support 1-8GB flash, DDR3 1333/1600
- ❖ Support multiple storage like hard disk, SSD, CF card, DOM
- ❖ Appearance is exquisite, not easy to scratch and leave fingerprints
- ❖ Support OEM and ODM

## Hardware Spec.

Platform	
Size	1U Frame
CPU	Intel® Baytrail J1800 2.4GHz/1MB
CPU type	Board sticking
Chipset	SOC
BIOS	SPI AMI EFI BIOS
Flash Info	
Flash	DDR3 1333/1600
Flash size	Default: 2GB, Optional: 4~8GB
Network Interface	
Interface	6 x GbE RJ45 Ports
Chipset	6 x Intel® I211AT
BYPASS	1 group is optional
Bypass Control	MCU or GPIO control
Serial Port	
Port	1 x RJ45 Serial port
Default baud rate	115200bps
Serial port definition	Compatible with Cisco definition
I/O Interface	
Reset Button	IPC, to control GPIO or BYPASS
LED Indicator	1 x Power Indicator (Green) 1 x Status Indicator (Orange)

# Enterprise Gateway & WLAN Controller (WD-C520)

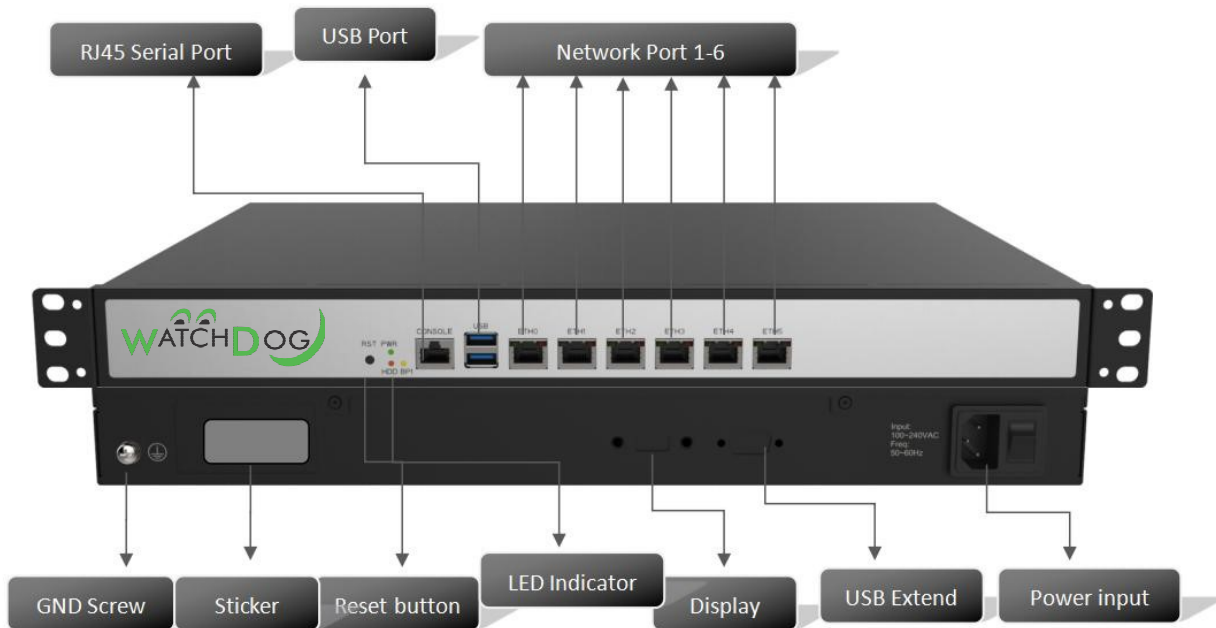
Intel® Baytrail™ J1800 Dual-Core CPU



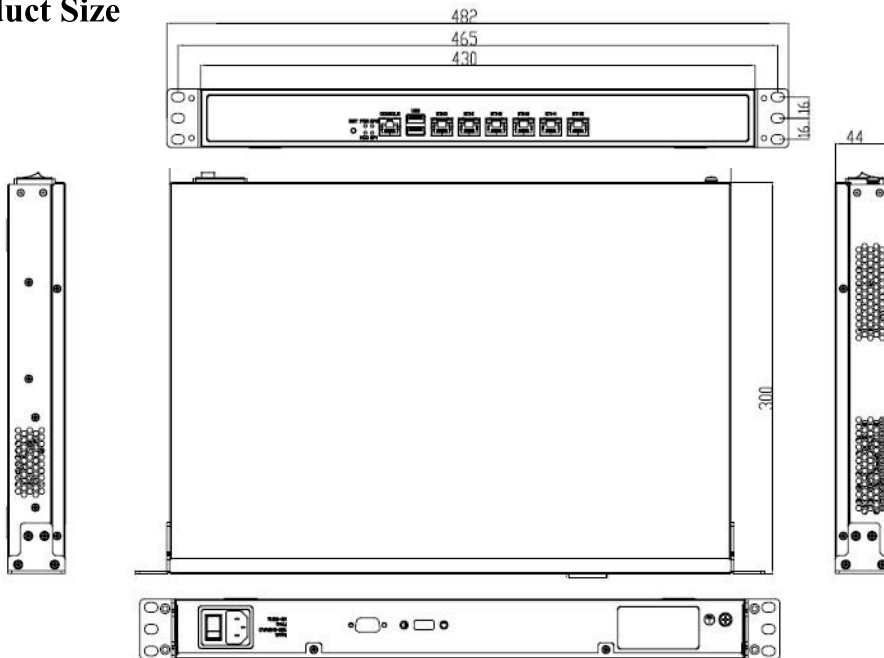
	2 x Bypass Indicator (Yellow)
Power Switch	1 x Power Switch
USB Port	2 x USB2.0 Port
Display port	1 x VGA Port (Optional)
Power Injector	1 x AC Power injector

<b>Storage</b>	
Storage type	General hard disk, SSD, CF Card, DOM
Hard disk	1 x SATAIII 2.5 inch hard disk, capacity optional
SSD	1 x M-SATA SSD, default: 8GB
CF card	1 x TYPEII CF card
DOM	1 x SATA DOM (share hard disk interface)
<b>Extend Port</b>	
PCIe	No
Mini-PCIe	No
<b>Others</b>	
Watchdog	Support
GPIO	6 lines
Heat Dissipate	No Fan module on mother board 1 x System Fan
<b>Power Supply</b>	
Power supply	Build in Open type power supply
Power Consumption	75W
Power input	AC 90V-264V @47-63Hz
<b>Size, Environment and Certification</b>	
Size	430 (L)×300(W)×44(H)mm
Package Size	545(L)*415(W)*180(H)mm
N.W	KG
G.W	KG
Working Temperature	0°C -50°C
Storage Temperature	-40°C ~70°C
Storage Humidity	5~95% RH, Non condensing
Certification	3C, ROHS

## Interface Info



## Product Size



## Firmware Features

The WD-C520 is a big size Enterprise Gateway based on X86 protocol. Support Load Balance, Ethernet backup and Ethernet Superimposed, multi-ISP access; then support DHCP, policy routing and VPN, together with Smart flow control, Abundant security, varied user management and multiple authentication function, it consistent to provide high efficiency and professional network connectivity for hotel, school, hospital, shopping mall. What's more, it can manage the wireless access point fast and stable in central and

remote, provide whole wireless coverage solution, cost saved and convenient.

## A. Multiple Gigabit WAN and multiple routing functions

The WD-C520 support PPPoE/DHCP/Static IP access, work with different ISP and max 512 end users can access into it. Support multiple Gigabit WAN ports, support load balance, Ethernet Superimposed and multiple ISP network access to avoid bandwidth overload, then support Ethernet backup to recover the dropped networking line, ensure the whole networking smoothly; It support policy-based routing function also, administrator will set the network based on IP/MAC/Domain/Interface policies.

## B. Smart QoS

The WD-C520 with powerful QoS functions: One-click to enable/disable the smart QoS, which can recognize the traffic size and traffic characteristics, algorithm the fairness and control network latency to improve the downloading, video, games and web pages network experience.

Multiline shunt policy like maximum allow 180 Ethernet lines to access and shunt, IP shunting and session shunting, process diversion and other shunting rules like time, port, routing table, application and shunting weight, to meet with different application request.

Application Priority Automatically: auto to give priority to games, web applications under bandwidth constraints conditions.

Support Policy Bandwidth control and TCP, UDP connection quantity according to IP address, individual users, user department and online time conditions to limited the maximum flow on each line, ensuring different service for different users and applications.

## C. Abundant security mechanism

The WD-C520 support a variety of security mechanism, like TCP/UDP/ICMP Flooding, IP/MAC/URL/Web filtering functions, Ping of Death and other related threats, extend protection to every port of the router and enable the ports to provide DoS/DDoS attack protection, traffic monitoring, Uniform Resource Locator (URL) filtering, and application layer filtering.

## D. Multiple authentication

The WD-C520 support portal authentication, PPPoE authentication and Radius authentication.

It support Wechat authentication, one-time password authentication, display or promote advertisement to user and bring extra value for merchant; Then support SMS authentication when access into cloud server and work with SMS gateway.

Then it can work with the 3rd party radius server for advertisement and billing functions.

What's more, it work as PPPoE server, can create PPPoE account, password, bandwidth and valid time, to realize PPPoE billing function.

## E. Remote Maintenance, Auto firmware upgrade

Administrator can access into WD -C520's management interface page remotely at home, to manage and maintenance the wireless access point, keep the whole network stable in economic way.

WD-C520 can automatically to upgrade the new released firmware, zero steps to recovery the system problem.

## F. Others

The WD-C520 support WAN port VLAN, VPN dial up, DNS Proxy, IP address translation, user behavior management, make it more professional in Enterprise.

## G.AC management for wireless AP

Assign IP address for Wireless AP: Build in DHCP Server, it can assign the IP address for wireless AP automatically when AP online; AP's IP address can be same/different as user's IP address based on request.

Template Configure: Administrator can set different template for different model, like SSID, password, mode, channel, RF power, coverage threshold and tag VLAN; Then can select wireless AP or upgrade AP firmware by models, different color show on/off status, very clear;

Channel Analysis: support Wi-Fi channel analysis, select the channel with less wireless AP to avoid latency and package loss, keep best wireless coverage performance.

Firmware Spec:	
AP Management	Max to access and manage 512 users
	Max to manage 512PCS wireless AP
	Centrally and remotely to manage/configure wireless AP
	View user's status
Smart Flow Control	One click smart flow control
	Powerful multiline diversion
	Application Priority Automatically
Load Balance	Multiple WAN, multiple ISP network access
	Intelligence load balance
	Ethernet line backup
	Ethernet Superimposed
	Policy routing: based on IP address, destination IP address, source MAC address, network port, domain, destination port, Extranet port, Identity binding
Protocol binding	
Routing	Static Routing
Behavior Management	All-round to block P2P firmware
	P2P flow control and bandwidth allot
	File and URL filter
	Monitor network behavior at all times
Bandwidth limitation	IP-based bandwidth limitation
	Safeguard / Restrict bandwidth
	Time strategy
	IP based session restriction
VPN	L2TP, PPTP, VTUNS
Security Center	MAC address filter
	UPR/key words filter
	Web content filter
	IP address filter
	Port mapping
	DMZ
Defense Center	TCP/UDP/ICMP flood defense
	Block TCP scanning
	Block ping WAN port
ARP Detection	Send GARP packets
	ARP Scanning on WAN/LAN port
	Online detection

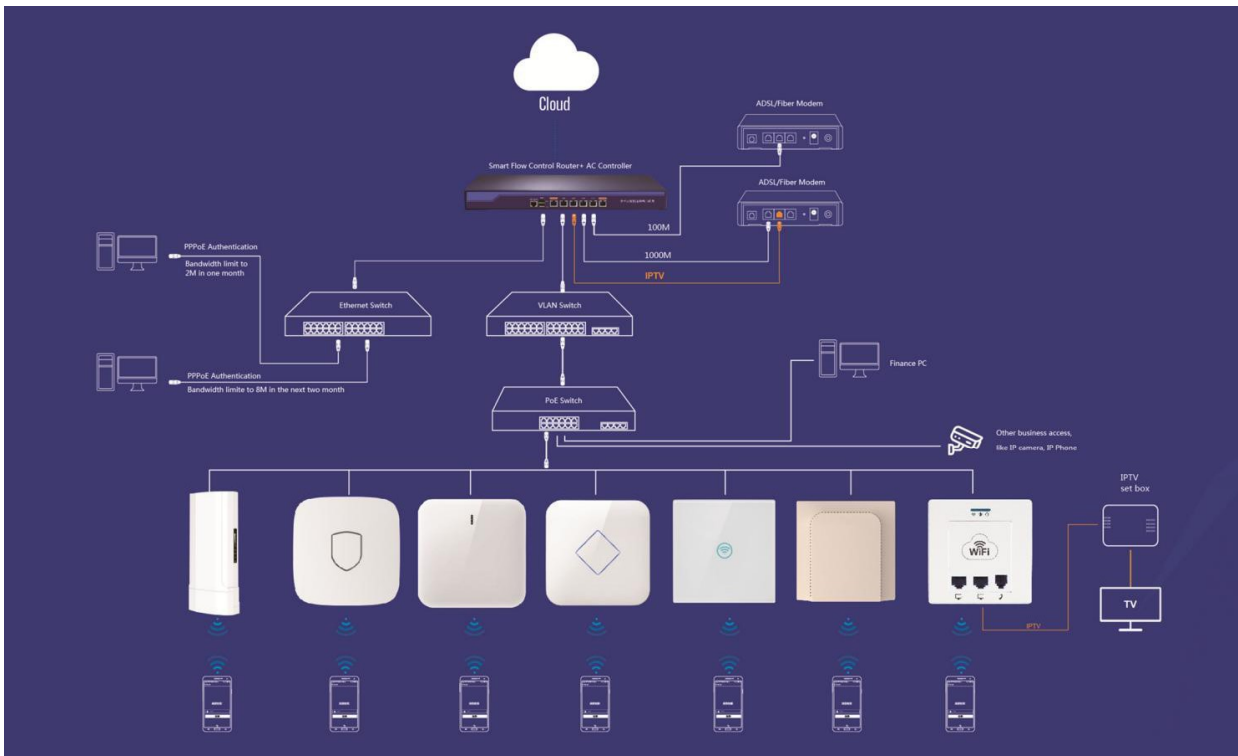
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	IP-MAC binding
Authentication	PPPoE authentication
	Portal authentication like Wechat Authentication, WEB password authentication, One-time password authentication, SMS authentication
	Radius authentication: work with the 3rd party radius server
Management	Web/CLI/Telnet management
	Remote management
Others	DDNS, VPN management
Content	AC-BW520 *1
	Power Cable *1
	Installation Accessory
	QIG*1

## Working Diagram



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