COMMANDO R1200-PRO 4x2.5Gbps, 2x10G SFP+, SD-WAN/WLC/LB//FW/VPN, Multifunctional Cloud Router Data Sheet

Contents

Product Overview

COMMANDO R1200-PRO Cloud Base Multi-Functional Wired Router with 4*10/100/1000/2500Mbps-RJ45 Ports and 2*10G SFP+ Slots configurable LAN/WAN Ports, with functions like Router, Wireless Controller, Multi WAN Load Balancer, Firewall with Captive portal along with Standard Wireless Roaming Mechanism (802.11r) , Authentication Server to Integrate and Simplify the Traditional Networking Mode, AC Management, Portal Authentication, Deep Packet Inspection (DPI) Seven-Layer flow Control, Supports Intelligent Networking (SD-WAN), 3200+ Application Protocol Identification.

It has excellent data processing capability and multiple powerful functions including Multi WAN Load Balancer, Access Control, Bandwidth Control, Session Limit, IM/P2P Blocking, VPN server, PPPoE Server, auto WAN failover recovery and captive portal to access infrastructure from anywhere via internet. It meet the needs of small, medium and large enterprise, Big commercial set up where no down time affordable due to network issue, hotels and communities with Up to 1200 users demanding a efficient and always UP network with high security. It is basically 6 in 1 Multi-functional device having feature like Multi WAN load balancer with auto fail-over mechanism for recovery due fault in connected multiple WAN links, Firewall, VPN Server, Wireless Controller for COMMANDO PRO Series AP and serves as a controller up to 1024 COMMANDO PRO Series AP, Cloud based 10 different kinds of authentication Configuration and monitoring along with SD-WAN for Enterprise Wired Router with features like static, Default and Dynamic connected route.

R1200-PRO adopts a new generation of high-performance hardware platform and is fully upgraded to 4* 2.5GE and 2*10G SFP+ Slots interface. It is mainly suitable for medium and large-scale application scenarios, and brings richer integrated services at the same time. It is mainly designed for corporate offices, schools, shopping malls, commercial residences and other scenarios. Multi-service gateway.In addition, with high computing power and large memory hardware design, multi-service routers provide rich SAAS services in the cloud, creating an edge computing platform at the network Edge.

Product Highlights

- 4*10/100/1000/2500Mbps-RJ45 Ports, 2*10G SFP+ Slots with configurable LAN/WAN Ports
- Standard Wireless Roaming Mechanism (802.11r)
- DPI (Deep Packet Inspection) Seven Layer Flow Control
- Support One Click Flow Control and Manual Flow Control
- 3200+ Application Protocol Identification, for more Accurate Flow Control, Improved Bandwidth Utilization
- Multi-WAN load balance with auto failover recovery for reliable and efficient access
- Access Point Management via Easy WEB GUI, Telnet and Could based Portal Authentication
- Built-in High-Performance Processor Suitable for Deployment of Large Scale Commercial Scenarios
- Support wireless marketing function and 10 kinds of authentication methods to meet the needs of different users and scenarios
- AC Intelligent Management Function, works together with COMMANDO PRO Series Access Points, easy Access Point Management
- Support COMMANDO Platform Management, Centralized Management and Maintenance via lifetime free Cloud base account
- Supports intelligent networking (SD-WAN) to manage and optimize the performance of WAN's.
- VPN for Encrypted Communication, Ensure Remote Access Security
- Support Multi Vendor WAN Line simultaneous Access, WAN load sharing and balancing by different ISP, Rational use, Load Balancing with failover , Reduce Bandwidth Costs
- Wireless Marketing Function, Various Authentication Methods to meet the needs of Different Users and Scenarios
- Tag based and port based VLANs to group control and relocate traffic pattern
- Fully protocol stack for both IPv4 and IPv6, afford to 600+ concurrent users and 100,00 concurrent sessions
- Supports IPsec, PPTP and L2TP VPN
- QoS and Bandwidth Management for optimal bandwidth usage.
- With Zero Touch Provisioning: Plug and play and no setup.
- High Availability for mission critical application with muti-WAN load balance
- WLAN controller can manage up to 1024 APs & up to 1200 users, with Discovery, Configuration, and Monitoring Functions.
- User certification by X.509 and authentication by Radius/AD/LDAP server for user and

group management.

• Supports Multiple WANs, Failover/ Load Balance with configurable Ethernet

• Support DHCP based dynamic IP, Static IP, PPPoE, PPTP, L2TP

• IPv6 with Dual Stack, 6-in-4, 6-to-4, Dynamic, Static, PPPoE

• Supports VLAN Port Based, Tag- based

• NAT: ALG, Special AP, DMZ Host, Virtual Server/ Computer, PPTP/ L2TP/IPSec Pass-through, Up to 100,000 Sessions

• Supports Routing with Static,Default and Dynamically learn connected route

• Client & Server for DHCP, DDNS, IGMP

• Management Features with Web, Simple Telnet CLI, SNMP

• AP Auto Discovery, Monitoring & Alerting, Profile based Configuration, AP Load balance, AP Blacklisting and Whitelisting

• User Accounts, User Grouping, Bound Services

• Firewall, Access Control with Packet Filters, URL Blocking, Web Content Filters, Application Filters, MAC filter

• Support One Click Flow Control and Manual Flow Control

• 3200+ Application Protocol Identification, for more Accurate Flow Control, Improved Bandwidth Utilization

• Access Point Management with Cloud Portal Authentication, Connected LAN PC WEB GUI and Telnet.

• Built-in High-Performance Processor Suitable for Deployment of Large Scale commercial Scenarios

• Comes with one-year default warranty – optionally extendable up to 3 years.

Features and Benefits

Easy to Use

COMMANDO R1200-PRO Series router are WEB GUI based easy to use and manage device. It requires minimal configuration, so setup is simple and hassle-free. Auto MDI/MDI-X crossover on all ports eliminate the need for crossover cables or uplink ports. Auto-Negotiation on each port senses the link speed of a network device (Either 10, 100, 1000, 2500 and 10000 Mbps) and smartly adjusts for compatibility and optimal performance. Its compact size makes it ideal for desktops as well as rackmount with limited space. Dynamic LED lights provide real-time work status display and basic fault diagnosis. Administrators to monitor the whole network status and take actions to remotely according to the recorded log information.

Cloud Base Wired Router

It has 4*10/100/1000/2500Mbps, RJ45 based Ports and 2*10G SFP+ Slots configurable and interchangeable LAN/WAN Ports which support 1200 Users with standard Wireless Roaming Mechanism (802.11r) with DPI (Deep Packet Inspection) Seven Layer Flow Control along with Portal based web access from anyone having credential via internet from any place. Support COMMANDO Cloud Platform Management, Centralized Management and Maintenance VPN for Encrypted Communication. Ensure Remote and cloud Access with security.

Multi-WAN load balancing with auto Fail over Mechanism

Support up to 5 WAN's and 5 LAN's , Multi WAN Access, Simultaneous WAN access provided by different (ISP) Operators with all used at a time via load balancing and preventing network outage automatically via fail-over mechanism , Rational use, Reduce Bandwidth Costs.

Wireless Marketing Function

High Authentication Methods via cloud based , time based, ticket based to meet the needs of different Users and Scenarios, Multi-functional Fusion. The COMMANDO Integrates Functions Such as DPI Flow Control, Load Balancing, AC Controller, VPN, and Authentication Server to Integrate and Simplify the Traditional Networking Mode. Equivalent to Integrating Multiple Devices and a Unified Network Management Platform into one Device, greatly reducing Networking and Maintenance costs

Deep Packet Inspection

It supports Multi-line, Each line is backed up with Each other. It has new Generation of DPI-based Traffic Identification Mechanism, and Fine Traffic Control with Link Balancing and Application Offloading to offload Core Applications.

Wireless Access Point Controller

It acts as Access Point Controller for COMMANDO PRO based AP, Support COMMANDO's PRO AP Centralized Management, AP can be configured as Virtual Antenna available with this controller without any Configuration and connection to Controller. It automatically Read Wireless Configuration after accessing the Network, AP Zero-based Networking, Expansion at

any time, Support Standard Wireless Roaming Mechanism (802.11r), to achieve Seamless Roaming between APs, Live streaming of Games, Video, Movies, voice, etc. is Uninterrupted.

Network Security

Built-efficient Behavior Management Routing and Firewall Modules, Support Flexible user Access Control Policies, Network Security, Network security to meet Different Customer needs. MAC Filtering function to block the access of illegal hosts. Supporting One-Click IP-MAC Binding to avoid ARP spoofing.

VPN (Virtual Private Network

Support IPsec, PPTP, L2TP and Open VPN, Allowing Offices in Different Regions of the Enterprise to Access ERP, CRM, Internal Server and other Production Systems of the company's Local Area Network at Any Time to Improve Work Efficiency. Out-of-office Employees can Access the Company's internal Network Resources through Secure Channels anytime and anywhere via COMMANDO Cloud access.

SD-WAN

SD-WAN enables to securely connect users, applications and data across multiple locations while providing improved performance, reliability and scalability. Virtual WAN architecture that allows enterprises to leverage any combination of transport services and provides centralized control and visibility over the entire network.

Online Behavior Management

Access Rules can permit or deny user for applications of FTP downloading, Email, Web browsing and so on. Supporting URL Filtering to prevent potential hazards from visiting the malicious Web sites. Bandwidth Control with flexible bandwidth management to automatically control the bandwidth of the host in bi-direction to avoid bandwidth over occupation, as well as optimize bandwidth usage. Session Limit to avoid few people to access resource.

Auto MDIX Capabilities

Auto sensing 10/100/100/2500/10000Mbps ports with auto MDIX capabilities which also removes speed and duplex mismatches automatically.

Compact and Silent Performance

It comes fan less models with Small form-factor, operates quietly, making it ideal for use in virtually any room or office. Perfect for noise sensitive environments.

Support uninterrupted critical network infrastructure

It has AC input power which protect from power surges through their inline power supply automatically. With this feature protect on cost and the impact to your business by losing these network devices and thus the users/servers connected to them.

Cost Efficient

State of art quality product that can serve on real time high-speed Performance with AC input power, highly reliable, conformance to international open standards , durable, serviceable, aesthetics, perceived quality, enhanced performance leads to value to money.

Green Technology

It features the energy-efficient Ethernet that can save power. It automatically adjusts power consumption according to the link status to limit the carbon footprint of your network. It also complies with RoHS, prohibiting the use of certain hazardous materials. Besides that most of the packaging material can be recycled and reused.

Software

COMMANDO R1200-PRO Cloud Base Multi-Functional Wired Router supports software functions as follows.

Monitoring

Interface, Terminal, Protocol, Policy, System, Flow Control.

System Setup

Basic Setting, Disk management, Cloud Account,Advanced Settings like ALG Set, Administration, Upgrading, Reboot.

Network

Interfaces, DHCP, DNS, IP/MAC Group, Static Routes, VLAN,VPN Client, UPNP NAT,
Port Mapping, IPv6, IGMP Agent.

Flow Control

Multi-WAN features   Load   Balancing/Protocol/Port   Forward/Domain
Name/Upload/Download, Smart Flow Control, IP/MAC Limiters, Protocol Library.

Access Controller

Wireless Overview, AP Configuration, AP group, AP Firmware Upgrades, Wireless black and white list, User Information.

Authentication

Captive Portal, VPN Server, Authentication Account, Push Notification.

Behavior

Behavior Audit with Mark MAC Address, MAC Control, Website Control, URL Control, Application Protocol Control, Secondary Routing, QQ, Blacklist/Whitelist.

Firewall

ACL Rules, ARP binding,Connection Limiter, Advanced Firewall.

Advanced application

Dynamic DNS, SNMP, Application across three layers, Wake on LAN, FTP Server, HTTP Server, UDPXY Set.

Services

Ping Test, Capture Packet, Trace Route, IP Subnetting, Speed Test, Diagnostics, Watchdog.

Log

User Logs, Function Logs, System Logs.

Table 1 Software functions

Software Features	Software Functions
Routing Function	Support IPv4 and IPv6 dual protocol stack.
	Support PPPoE, static IP, DHCP and other commonly used access methods.
	Support LAN/WAN custom settings, support VLAN.
	Support bandwidth superposition, such as accessing multiple WANs at the same time, using multi-threaded tools to download, can realize bandwidth superposition.
	Supports load balancing based on IP, port, number of connections, and traffic.
	Line backup: one is the main line and the other is the backup line. When the main line is dropped, the backup line will take over.
	Data diversion: Line allocation can be performed according to source IP, destination IP, source port, destination port, domain name, and application protocol, or the direction can be automatically allocated according to the number of Internet users, and supports uplink and downlink separation and diversion.
	Policy routing: It can access different operators at the same time, and supports custom operators. Support policy routing function to solve the bottleneck problem of network access between different operators; support static routing.
	Support one-line multi-dialing and wan extension.
	Support port mapping, DMZ, UPnP, NAT rules, IGMP proxy.
	Support PPTP/L2TP/IPSec VPN/Open VPN function.
	Gateway and bypass deployments supported.
	One-click intelligent flow control: You only need to select the flow control scenario and set the WAN bandwidth. The device optimizes bandwidth resources in real time according to the bandwidth usage to ensure key applications and improve bandwidth utilization. In addition, it supports manual flow control mode to support customer personalization, Customize specific flow control policies.

Traffic Control	**Flow control module:** It can accurately identify more than 3,200 application protocols, assign priorities and line directions to various application protocols, and the database supports real-time online updates to achieve accurate flow control based on application protocols.
	Supports line-based flow control for time periods based on source IP, port, domainname, and time.
Behavior Management	Supports time-based and group-based PC and mobile APP application management strategies, supports domain name black and white lists, URL redirection, URL keyword and parameter substitution.
	Supports network sharing control, such as secondary routing.
	Support behavior management log viewing, including URL log, IM software online and offline records, terminal online and offline records.
Authentication and Accounting	Support cloud platform portal authentication, support more than 10 authentication methods, including applet, WeChat, mobile phone, QQ, Microblog, user,password, countdown, coupon, trial, one-key authentication.
	Support a variety of authentication template options, support custom scrollingpictures and logos.
	Supports authentication-free settings based on mac, IP, and domain name.
	Support local PPPoE Server, support connection to third-party authenticationserver.
	Support batch import and export, support custom packages support coupon management,support account password self-service password modification.
	Support notification function, including real-time notification, periodic notification, account expiration reminder, PPPoE expiration reminder.
	Support bypass authentication, support multiple device authentication roaming.
Network Security	Support global connection limit, which can be set separately based on time and IP
	Supports defense against ARP attacks and improves intranet security.
	Support DDOS defense and traffic attack defense, support internal and external network prohibition of Ping, prohibit internal network client Tracert.

	Supports ACL rules based on IP, protocol, port, time period, data direction, and interface.
Cloud Management	Through cloud configuration and management, unified configuration, distribution and management of managed gateway devices and AP devices.
	Supports batch delivery of wireless rules from the cloud, including SSID, SSID hiding and isolation, AP balance mode, and wireless security settings.
	Support configuration cloud backup.
	Through the cloud, the device name, device online status, user data, online duration, and the number of terminals under the device are realized.
AC Management	Support terminal fast roaming, 5G priority.
	Automatically discover wireless device APs in the network, and manage the network uniformly through the wireless controller.
	Support for AP upgrade, restart, and factory reset, support for radio frequency shutdown and AP timing restart.
	Support to view the online/offline status of AP.
	Support wireless black and white list.
	Support setting AP isolation, SSID isolation.
Applications	Support dynamic domain name, including
	Support Port Mirroring, Wake-on-LAN, FTP, HTTP Static Service, UDPXY.
	Support line speed measurement, route physical examination, health monitoring, subnet conversion, and packet capture tools.
System Management	Support cross three-layer application, support cross three-layer authentication, mac address filtering, etc.
	Support SNMP, Telnet, ssh, http, https, Console management.
	Support Ping, Tracert.
	Support multi-level login account permission settings.
	Support scheduled restart and shutdown.
	Support user log, function log, system log record.

Hardware

Solid performance with non-blocking architecture

• RAM 8G, FLASH 64G

• 4 ports capable of 2.5GE speed and 2 Ports Capable of 10G/10GE SFP+. Full speed of data transferring with (Auto- Negotiation/Auto MDI/MDIX).

• Solid performance with non-blocking architecture.

Physical Ports and Networking Interfaces

• Up to 4 x 10/100/1000/2500Mbps RJ45 Ports and 2*10G SFP+Ports with configurable LAN/WAN ports.

• USB Ports: 1*USB 3.0 +1*USB 2.0

• LED Indicators :Power, Link/Act, SYS, NET, USB

Extra Long operational life

• High Quality PCB Circuit Board and PCB Surface Treatment Using Gold Sinking Process.

• Support temperature range 0° C to 45° C

• Desktop, Rack and Wall mount design that enables to mounts in an EIA - Standard 19- inch telco rack or equipment cabinet along with Rack-mounting kit available with device. Which enables horizontal surface mounting, wall mounting and also having durable robust metal body.

Noise-free Operation

• The ports support reduced power modes so that ports not in use can move into a lower power utilization state. Small form-factor, fanless for silent operation. Perfect for noise sensitive environments.

Table 2 Hardware Specifications

Parameter	Hardware Specification
RAM	8G
FLASH	64G
WAN PORT	5/1
LAN PORT	1/5
Interface	4*10/100/1000/2500Mbps-RJ45 Ports 2*10G SFP+ Slots
Throughput(1500 Bytes)	7500Mbps
Packet Forwarding Rate	850kpps
Maximum Number of Concurrent Users	600

AP Number	1024
User capacity	1200
Protection Level	IP30
Working Altitude	86KPA~106KPA
USB	1*USB 3.0 +1*USB 2.0
Dimensions	440*280*44mm, 19-inch Rack mountable
Power Consumption	≤30W
Power Supply	AC 100~240V 50/60Hz
Reset	Hardware Reset button and Software reset via WEBGUI
Warranty Period	1 Year

Specifications

It supports IEEE 802.3x along with TCP/ IP, DHCP Server, ICMP, NAT, PPPoE, SNTP, HTTP, DNS with acceleration, Multi DNS DDNS, UPnP, NTP protocols. It has 4* 10/100/1000/2500M and 2*10G SFP+ Slots Auto-Negotiation LAN/WAN RJ45 port with Auto MDI/MDIX with, Auto-Negotiation WAN/LAN ports.

Table 3. Specification

Specification	Information
Interface	4 * 10/100/1000Mbps Port 2*10G SFP+ Slots
Throughput	7500Mbps
RAM	8GB
Flash	64GB
Power	AC 100~240V 50/60Hz
Max Power Consumption	30W
Max User Capacity	1200
Protection Level	IP30
Material	19-inch 1U Iron Shell
Indicator light	Power, SYS, USB, NET, Link/ACT
Working Temperature	0℃ to +45℃
Working Humidity	5%~95%RH (Non-condensing)
Dimension	440mm*280mm*44mm

Table 4. LED Indication

LED Indication	LED Status
Power	**Green OFF:** No power on the switch. **Green ON:** The switch powered on
Link/Act	**LINK/ACT bi-color LED:** **OFF:** Port disconnected or link fail. **Green ON:** 1000Mbps connected. **Amber ON:** 10/100Mbps connected. **Green Flashing:** 1000/2500/10000Mbps connected and Data in transit **Amber Flashing:** 10/100Mbps connected and Data in transit
System	**Green OFF:** The system is starting, please wait **Green ON:** The system is up and running
NET	**OFF:** Internet is not provided on port **Green ON:** Internet is provided on port
USB	**OFF:** USB not connected **Green ON:** USB connected

Included in the bundle/box

All COMMANDO R1200-PRO are made available for use globally along with accessories in the bundle to facilitate for enhance operations.

The switch box comes included with the following accessories:

• 1× COMMANDO R1200-PRO RoutePRO, Multifunctional Cloud Router

• 1x Console cable

• 1x Rack/Wall mountable kit

Support and Warranty

• Same-day assistance

• Comprehensive 24-hour support using common communication/chat platforms, Email and Telephone.

• Provide FAQs and troubleshooting help online (self-service) through cloud-based solutions.

• Highly technical and trained representatives to resolve issues.

• One-year default warranty with option of warranty extension up to 3 years

Table 6. Support and Warranty

Warranty and Support	
Products covered	COMMANDO R1200-PRO RoutePRO, 4x2.5Gbps, 2x10G SFP+, SD-WAN/WLC/LB//FW/ VPN, Multifunctional Cloud Router
Warranty duration	One Year RTB (Return To Base) replacement warranty – optionally extendable up to 3 years.
Hardware replacement	COMMANDO, its resellers or its service center will use commercially reasonable efforts to replace the product subject to stock availability. Otherwise, a replacement will be arranged within 15 working days after receipt of the Return Materials Authorization (RMA) request.
End-of-life policy	In case of discontinuation of the product, support is limited to 3 years from announcement date.
Effective date	Hardware warranty commences from the date of shipment to customer (and in case of resale by a COMMANDO reseller, not more than 90 days after original shipment by COMMANDO).
Support duration	Lifetime support.
COMMANDO Care	COMMANDO will provide 24x7 support for basic configuration, diagnosis, and troubleshooting of device-level problems for up to one year from the date of shipment of the originally purchased product. This support does not include solution or network-level support beyond the specific device under consideration.
Online Portal Access	Warranty allows guest access to commandonetworks.com for all available technical queries.

Ordering Information

Ordering information for the COMMANDO R1200-PRO. To place an order, please contact your local reseller/distributor or COMMANDO Sales Representative at www.commandonetworks.com/ordering

Table 7. COMMANDO R1200-PRO series Ordering Information

Product Code	Product Description
R100-PRO	COMMANDO RoutePRO, 5GE, Router, Load Balancer, Wireless Controller, Firewall w/ Captive portal
R300-PRO	COMMANDO RoutePRO, 6x2.5Gbps, SD-WAN/WLC/LB//FW/VPN, Multifunctional Cloud Router
R1200-PRO	COMMANDO RoutePRO, 4x2.5Gbps, 2x10G SFP+, SD-WAN/WLC/LB//FW/VPN, Multifunctional Cloud Router

Document History

Release	New or Revision	Described in	Date
Release 1	First Release	First Release	September 1, 2024