

Model Name:

VR530V (HW: T2)

**Wireless AC1200 Dual-Band Gigabit VDSL2
4-Port Ethernet IAD**

External Specification

Version: 1.0.0

Specification Revision History

Version	Revised Date	Person Name	Content Revised
1.0.0	2020/9/17	Shihao Liu	First Edition

1 Product Descriptions

The VR530V Wireless AC1200 VDSL2 4-port Ethernet IAD is a versatile, high-speed remote router for home and the small office. Users can embrace the great convenience and efficiency not only for Internet browsing, P2P applications, on-line gaming but also for IPTV service, VoIP service, sharing of printers and USB storage devices etc., either through wired or wireless connectivity. Meanwhile, VR530V provides physical Giga Ethernet WAN port and FXS port for VoIP.

The VR530V enables your PC and electronic devices to access the local wireless network with high data rate up to 1200Mbps and it is compatible with 802.11n and 802.11ac standards.

2 Product Specifications and Features

H/W Features

Specification

Key Components / Connectors / Performance	
Network Processor	VSPM340
Wireless Chipset (11n 2x2 2.4GHz)	MT7603E
Wireless Chipset (11ac 2x2 5GHz)	MT7612E
Flash Memory	128M bytes (pin-to-pin upsize)
RAM	128M bytes (pin-to-pin upsize)
VoIP	FXS x 2 (Optional)
ITU-T K.21	Compliant (optional)
Interfaces (TR-068 Compliant)	
LAN	4x 10/100/1000Base-TX MDI/MDIX RJ-45 ports Compliant with following standards: <ol style="list-style-type: none">1. IEEE 802.3/802.3u/802.3ab2. Hardware based 10/100/1000, full/half, flow control auto negotiation3. Non-blocking wire speed reception and transmission4. Full duplex IEEE 802.3x flow control and half duplex back-pressure flow control5. Broadcast storm protection6. Automatic address learning, address aging and address migration7. Integrated address Look-Up Engine, 1 K absolute MAC addresses supported8. IEEE 802.3az EEE compliant

USB	<p>Support up to USB2.0 & USB3.0</p> <ol style="list-style-type: none"> 1. Power level: 1500mA 2. USB port supports USB mass storage device for any External flash disk. 3. USB support 3G/ LTE dongle. (3G/LTE dongle requires consumers to buy their own, rather than the accessories of this product.)
WAN	<p>1x inner pair RJ-11 for VDSL port 1x GE WAN port RJ-45 10/100/1000Mbps, Auto MDIX (Optional)</p>
WLAN	<p>2 detachable 2.4G External 5dbi antenna by default 2 detachable 5G External 5dbi antenna by default</p> <ul style="list-style-type: none"> ● Wireless on/off switch <p>IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE n, IEEE 802.11ac compliant</p> <p>Standard compliance:</p> <ul style="list-style-type: none"> ● 802.11 a/b/g/n/ac <p>Modulation:</p> <ul style="list-style-type: none"> ● 802.11ac: BPSK, QPSK, 16QAM, 64QAM, up to 256QAM with OFDM. ● 802.11n: OFDM, BPSK, QPSK, 16QAM, 64QAM ● 802.11g: PSK/CCK, DBPSK, DQPSK, OFDM, BPSK, QPSK, 16QAM, 64QAM ● 802.11b: CCK(11&5.5 Mbps), DQPSK (2Mbps), DBPSK (1Mbps), DSSS <p>Operating Frequencies:</p> <ul style="list-style-type: none"> ● 802.11b/g/n:2400-2485MHz ● 802.11a/n/ac:5150-5250MHz ● Channel bandwidth:20MHz <p>Maximum power of the transmitter</p> <ul style="list-style-type: none"> ● 2.4 GHz: up to 20 dBm ● 5 GHz: up to 23 dBm ● Transmit power control

LED indicators

* Flashing at 2Hz with a 50% duty cycle when trying to detect carrier signal;
flashing at 4 Hz with a 50% duty cycle when the carrier has been detected and the modem is trying to train

S/W Features

Feature Item	Feature	Detailed Description
ATM & PTM/PPP Protocols	Multiple protocol encapsulation over AAL5	RFC 1483, RFC 2684
	Bridged and routed Ethernet encapsulation	
	Logical Link Control (LLC) encapsulation	
	VC-based multiplexing	
	MAC Encapsulated Routing	RFC 1483 MER
	ATM Forum UNI3.1/4.0 PVC	Up to 8 PVCs
	ATM Cell Format ITU-T Rec. I.361	
	ATM Adaptation Layer Type 5 (AAL5)	
	ITU-T I.610 OAM Principles & Functions	include F4/F5 loopback
	PPP over ATM	RFC 2364
	PPP over Ethernet	RFC 2516
	PPP Link Control Protocol (LCP)	RFC 1661
	Internet Protocol Control Protocol (IPCP)	RFC 1332
	PPP Authentication Protocol (PAP)	RFC 1334
	PPP Challenge Handshake Authentication Protocol (CHAP)	RFC 1994
	Microsoft PPP CHAP extensions	RFC 2433
	Multiple PPPoE sessions over single PVC	
Multiple services, i.e. PPPoE, Bridge, and MER, over single PVC		
PTM traffic shaper/scheduler		
Network and Features	WAN: Interface: ATM/PTM/Ethernet/3G DHCP/Static/PPPoE/PPPoA/Bridge	
	Port mapping	
	Network Address Translation (NAT); at least 3000 NAT sessions	RFC 1631
	IP Static Routing	
	Routing Information Protocol (RIP, RIPv2)	RFC 1058, RFC 1723
	Virtual Server, Port Forwarding	
	Port Triggering	
	NAT ALGs: FTP, SIP, H323, RTSP (Real Player etc.), ...	
	Dynamic Host Configuration Protocol (DHCP); DHCP server, client, and relay	RFC 2131
	DNS Relay, DDNS	
IGMP proxy	v.1/v.2/v.3	

	IGMP snooping (32 multicast groups)	
	Simple Network Time Protocol (SNTP)	
	<p>IPv6:</p> <ol style="list-style-type: none"> 1. RFC conformance for IPv6 Phase-II Logo <ul style="list-style-type: none"> ● RFC 2460: Base Specification for Ipv6 ● RFC 4861: Neighbor Discovery Specification for Ipv6 ● RFC 4862: IPv6 stateless Address Auto-configuration Specification ● RFC 1981: Path MTU Discovery for Ipv6 ● RFC 4443: ICMP for IPv6 2. Other RFCs (supported per request) <ul style="list-style-type: none"> ● RFC 4291: Ipv6 Addressing Architecture support ● RFC 3315: DHCP for Ipv6 ● RFC 2472: IPv6 over PPP ● RFC 2462: Address Prefix Advertisement & Duplicate Address Detection ● RFC 3633: Ipv6 prefix option for DHCPv6 ● RFC 3646: Acquiring DNS config info from DHCP server ● RFC 4890: Filtering ICMPv6 message ● RFC 5095: Internet Protocol, Version 6 (IPv6) Specification ● RFC 3587: IPv6 address types – Unicast ● RFC 4193: Unique IPv6 Local Address ● RFC 1981: IPv6 MTU path discovery ● RFC 2461: Neighbor Discovery for IP Version 6 (IPv6) 3. Dual Stack (supported per request) <ul style="list-style-type: none"> ● Ipv6 tunnel 	<p>IPv6 and IPv4 dual stack</p> <p>For Ipv6 tunnel: only support Ds-Lite and dual ipv4&ipv6</p>
Firewall	Built-in NAT firewall	
	MAC Filtering	
	Packet Filtering	IP/ICMP/TCP/UDP
	URL Content Filtering (keyword filtering)	Parent Control
	Domain Blocking	
	Stateful Packet Inspection (SPI)	
	Denial of Service prevention (DoS)	
	Intrusion Detection System/Log	
	DMZ	
VoIP (Optional)	SIP endpoints manipulation (internal calls, local voice features - CF, CT, CW)	
	Codecs: G711u law, G.711a law, G.722, G729 a/b	
	Outbound Proxy	
	Call rules, Speed dial, Call block, Country code select, Logs	

	Multi-profile, 2 fxs line.	
	G.168 Echo canceler	
	Fax: G711 pass through , T.38	
USB 3.0 Host Features	3G/4G LTE USB Modem backup/failover	Need to provide dongle to RD for porting
	USB Storage Device File Sharing	Samba
VPN	Multiple IPSec/PPTP/L2TP pass-through	Supports up to 8 IPSec VPN tunnels; For one L2TP server, only one client session is allowed
QoS	ATM QoS	CBR, rt-VBR, nrt-VBR, UBR
	Traffic Classification/Prioritization: Port-based priority 802.1p (0~7) VLAN tag Diffserv-Codepoint in TOS field (0~63) Application port-based priority User-defined priority (TCP/UDP/ICMP etc.)	
	Queuing/Scheduling: Round Robin; Weighted Round Robin(WRR); Strict Priority(SP) etc. 3 priority queues per PVC	
	Rate Limiting (Shaping): Bandwidth Control (64K/128K/256K/512K/1M/10M/Unlimited...)	
	64/128-bit WEP engine	WEP weak key avoidance
	Multiple SSID (up to 4)	
	MAC address ACL	
	AES-CCM/CCMP engine	
	WPA-PSK	TKIP/AES
	WPA2 personal – PSK	AES block cipher
	WPA2 Mixed Mode – PSK	TKIP-AES encryption
	802.1x RADIUS	
	EAP encapsulation over LANs w/ RADIUS client	
	802.11e WLAN QoS	WMM/WME
WPS Function		

Maintain	Web-based GUI configuration:	
	only W3C-compliant browsers supported	Firefox 1.5 and up, IE 6.0 and up, Safari 1.3 and up
	3-level login control for local/remote management	
	TFTP for firmware, configuration files and image files upgrade and download	default Off from LAN (Support upon request)
	TFTP server and client	Currently TFTP client supported
	Code Lock to prevent from improper firmware upgrade through UI, TFTP, and TR-069 etc.	Lock by F/W prefix, by model, by chipset solution, by chipset generation etc.
	Local access via internal console pin (optional)	Menu driven user interface & command line interface
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	UPnP IGD 1.0	
	VDSL2/ADSL2/ADSL2+ manual selection and auto fallback	Multi-mode by default
	Auto VPI/VCI detection (optional)	Not TR-062, TR-037 compliant
	Configuration backup and restore	
	Diagnostics	
	Log & Trace function	default On
TR-069 compliant w/ ACS	(Supported upon request)	
Customization	Support Dual Image	
	support for different languages in GUI	to be supported by specification
	syslog (Call History, Firewall and SIP messages included)	
	Traffic mirroring (real-time traffic on ETH port)	
	IPerf	

3 Mechanic & ID Design Outlook



Case

- Dimensions: 235mmx167mmx56mm
- Materials: ABS fireproof material