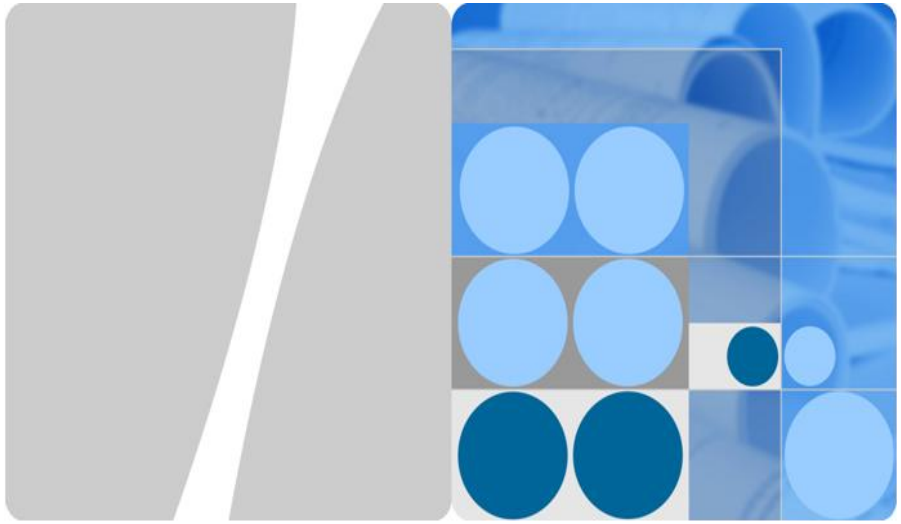

AR G3 Feature List

Version **V2.3**
Date **2012/12/26**

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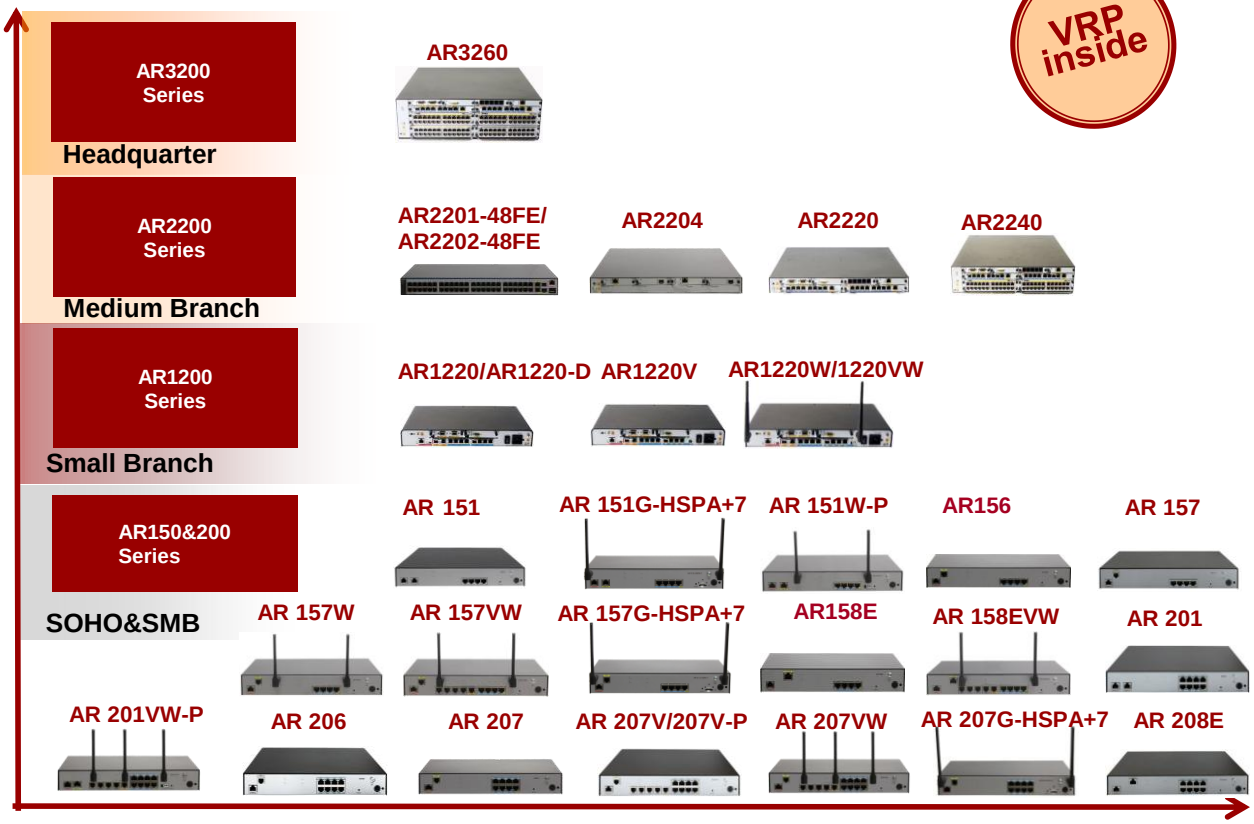
AR Products Portfolio



No.	Sub-system	Item	Specification	Model																		
				AR151	AR151W-P	AR151G-HSPA+7	AR156	AR157	AR157W	AR157VW	AR157G-HSPA+7	AR158E	AR158EVW	AR201	AR201VW-P	AR206	AR207	AR207V	AR207V-P	AR207VW	AR207G-HSPA+7	AR208E
	System specification																					
1		Main control system																				
2			Memory (default/maximum)	512M																		
3			Flash memory	512M																		
4			DSP Channels	0	0	0	0	0	0	8	0	0	8	0	8	0	0	8	8	8	0	0
5		Fixed interfaces																				
6			Fixed LAN port	4 FE										8 FE								
7			Fixed WAN port	2FE (the interface LAN 0 of which can be used as one WAN interface)	2FE (the interface LAN 0 of which can be used as one WAN interface)	2FE (the interface LAN 0 of which can be used as one WAN interface)	1-port ADSL ANNEX B 1FE (the interface LAN 0 of which can be used as one WAN interface)	1-port ADSL ANNEX A/M 1FE (the interface LAN 0 of which can be used as one WAN interface)	1-port ADSL ANNEX A/M 1FE (the interface LAN 0 of which can be used as one WAN interface)	1-port ADSL ANNEX A/M 1FE (the interface LAN 0 of which can be used as one WAN interface)	1-port ADSL ANNEX A/M 1FE (the interface LAN 0 of which can be used as one WAN interface)	1 G.SHDSL 8-wire,1FE(the interface LAN 0 of which can be used as one WAN interface)	1 G.SHDSL 8-wire,1FE(the interface LAN 0 of which can be used as one WAN interface)	2FE (the interface LAN 0 of which can be used as one WAN interface)	2FE (the interface LAN 0 of which can be used as one WAN interface)	1-port ADSL ANNEX B 1FE(the interface LAN 0 of which can be used as one WAN interface)	1-port ADSL ANNEX A/M 1FE(the interface LAN 0 of which can be used as one WAN interface)	1-port ADSL ANNEX A/M 1FE(the interface LAN 0 of which can be used as one WAN interface)	1-port ADSL ANNEX A/M 1FE(the interface LAN 0 of which can be used as one WAN interface)	1-port ADSL ANNEX A/M 1FE(the interface LAN 0 of which can be used as one WAN interface)	1-port ADSL ANNEX A/M 1FE(the interface LAN 0 of which can be used as one WAN interface)	1 G.SHDSL 8-wire 1FE(the interface LAN 0 of which can be used as one WAN interface)
8			Wi-Fi port	X	802.11 B/G/N	X	X	X	802.11 B/G/N	802.11 B/G/N	X	X	802.11 B/G/N	N	802.11 A/B/G/N	X	X	X	N	802.11 A/B/G/N	X	X
9			USB port (2.0)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10			SD card port	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11			AUX/Console port	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12			3G port	Supported by USB	Supported by USB	Supporting HSPA+, WCDMA, GRPS, and EDGE; Supporting indoor remote antennas	Supported by USB	Supported by USB	Supported by USB	Supported by USB	Supporting HSPA+, WCDMA, GRPS, and EDGE; Supporting indoor remote antennas	Supported by USB	Supported by USB	Supported by USB	Supported by USB	Supported by USB	Supported by USB	Supported by USB	Supported by USB	Supporting HSPA+, WCDMA, GRPS, and EDGE; Supporting indoor remote antennas	Supported by USB
13			KingSton lock	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
14			ESD wrist jack	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
15		Power supply																				
16			Rated input voltage (AC)	AC: 100-240V 50/60Hz																		
17			Maximum input voltage (AC)	AC: 85-264V 47/63Hz																		
18			Maximum power capacity	36 W	36 W	36 W	36 W	36 W	36 W	36 W	36 W	36 W	36 W	36 W	36 W	36 W	36 W	36 W	36 W	36 W	36 W	36 W
19			PoE (W)	X	External power 100 W. Only four fixed ports (FE0-FE3) are supported.	X	X	X	X	X	X	X	X	X	External power 100 W. Only eight fixed ports (FE0-FE7) are supported.	X	X	X	External power 100 W. All the eight fixed LAN ports are supported.	X	External power 100 W. All the eight fixed LAN ports are supported.	X
20		Physical specifications																				
21			Dimensions (H x W x D)	300x216.4x44																		
22			Weight	<3kg																		
23			Environment temperature	0-40℃																		
24			Humidity	5% to 90%, non-condensing																		
25		Reliability																				
26			MTBF (year)	29.03967	30.35	30.35	29.03967	29.03967	30.35	30.35	30.35	29.03967	30.35	29.03967	77.27	29.03967	29.03967	29.03967	29.03967	60.23	29.03967	29.03967
27			MTTR (hour)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
28		Performance																				
29			Basic forwarding performance (64-byte packets)	300kpps	300kpps	300kpps	300kpps	300kpps	300kpps	300kpps	300kpps	300kpps	300kpps	450kpps	450kpps	450kpps	450kpps	450kpps	450kpps	450kpps	450kpps	450kpps
30			NAT + ACL + QoS forwarding bandwidth (IMIX, bidirectional forwarding)	100M	100M	100M	100M	100M	100M	100M	100M	100M	100M	150M	150M	150M	150M	150M	150M	150M	150M	150M
31			IPSec forwarding bandwidth (bps, IMIX, unidirectional forwarding)	80M	80M	80M	80M	80M	80M	80M	80M	80M	80M	100M	100M	100M	100M	100M	100M	100M	100M	100M
32			FW forwarding bandwidth (bps, IMIX, unidirectional forwarding)	140M	140M	140M	140M	140M	140M	140M	140M	140M	140M	180M	180M	180M	180M	180M	180M	180M	180M	180M
33			MAC entry	256	256	256	256	256	256	256	256	256	256	2K	2K	2K	2K	2K	2K	2K	2K	2K
34			ARP entry	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	2000	2000	2000	2000	2000	2000	2000	2000	2000
35			Number of VLANs	64	64	64	64	64	64	64	64	64	64	128	128	128	128	128	128	128	128	128
36			Number of IPv4 routes on a device	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	5000	5000	5000	5000	5000	5000	5000	5000	5000
37			Number of FIB4 forwarding tables on a device	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	5000	5000	5000	5000	5000	5000	5000	5000	5000
38			Number of IPv6 routes on a device	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	5000	5000	5000	5000	5000	5000	5000	5000	5000
39			Number of FIB6 forwarding tables on a device	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	5000	5000	5000	5000	5000	5000	5000	5000	5000
40			Maximum number of VRFs	4	4	4	4	4	4	4	4	4	4	32	32	32	32	32	32	32	32	32
41			Number of VPN routes on a device	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	5000	5000	5000	5000	5000	5000	5000	5000	5000
42			Number of IPSec tunnels	30	30	30	30	30	30	30	30	30	30	75	75	75	75	75	75	75	75	75
43			Number of L2TP tunnels	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
44			Number of L2TP sessions	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
45			Number GRE tunnels	32	32	32	32	32	32	32	32	32	32	128	128	128	128	128	128	128	128	128
46			Maximum number of SSL VPN access users	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
47			Maximum of concurrent SSL connections on a device	128	128	128	128	128	128	128	128	128	128	256	256	256	256	256	256	256	256	256
48			Maximum number of configured ACLs	256	256	256	256	256	256	256	256	256	256	2K	2K	2K	2K	2K	2K	2K	2K	2K
49			Maximum number of configured IPv6	256	256	256	256	256	256	256	256	256	256	512	512	512	512	512	512	512	512	512
50			Maximum number of NAT address	4	4	4	4	4	4	4	4	4	4	8	8	8	8	8	8	8	8	8
51			Number of IP addresses in each NAT address pool	16	16	16	16	16	16	16	16	16	16	255	255	255	255	255	255	255	255	255
52			Maximum number of concurrent NAT connections	8K	8K	8K	8K	8K	8K	8K	8K	8K	8K	16K	16K	16K	16K	16K	16K	16K	16K	16K
53			Maximum number of concurrent connections to the firewall	8K	8K	8K	8K	8K	8K	8K	8K	8K	8K	16K	16K	16K	16K	16K	16K	16K	16K	16K
54			Maximum number of concurrent calls	-	-	-	-	-	-	20	-	-	20	-	30	-	-	30	30	30	-	-
55			Maximum of DSP channels (PBX and	-	-	-	-	-	-	8	-	-	8	-	8	-	-	8	8	8	-	-
56			Maximum number of registered SIP UEs (PBX and AG BEST)	-	-	-	-	-	-	16	-	-	16	-	64	-	-	64	64	64	-	-
57			Rule set of the voice blacklist and whitelist	-	-	-	-	-	-	18	-	-	18	-	18	-	-	18	18	18	-	-
58			Maximum number of rules that can be configured for each blacklist and whitelist	-	-	-	-	-	-	64	-	-	64	-	64	-	-	64	64	64	-	-
59			Number of MPLS LDP VCs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60			Maximum number of 6over4 tunnels	32	32	32	32	32	32	32	32	32	32	128	128	128	128	128	128	128	128	128
61			Maximum number of 4over6 tunnels	32	32	32	32	32	32	32	32	32	32	128	128	128	128	128	128	128	128	128
62			Recommended number of APs that the AC can manage	4	4	4	4	4	4	4	4	4	4	8	8	8	8	8	8	8	8	8
63			Maximum number of concurrent users allowed by the AC	80	80	80	80	80	80	80	80	80	80	160	160	160	160	160	160	160	160	160
64	**Feature specification**																					
65	**Ethernet port management**																					
66		Ethernet port		EthernetII packets(RFC 894), SNAP packets(802.3 SNAP)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
67		Link		IEEE 802.3ad	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
68		LACP		Supports static LACP, M:N backup among member interfaces in an aggregation group	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

No.	Sub-system	Item	Specification	Model																		
				AR151	AR151W-P	AR151G-HSPA+7	AR156	AR157	AR157W	AR157VW	AR157G-HSPA+7	AR158E	AR158EVW	AR201	AR201VW-P	AR206	AR207	AR207V	AR207V-P	AR207VW	AR207G-HSPA+7	AR208E
69	**LAN access**																					
70	**VLAN management**																					
71		Basic VLAN	IEEE 802.1P, 802.1Q	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
72		Interface link type	Access, trunk, and hybrid	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
73		VLAN aggregation	Super-VLAN and DHCP relay in a Super-VLAN	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
74		Guest VLAN		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
75		Voice VLAN		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
76		GVRP		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
77		VLANIF		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
78	**MAC address management**																					
79		Static MAC address and dynamic MAC address		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
80		MAC address limit		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
81		Sticky MAC address		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
82		MAC address flapping		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
83		Invalid MAC address alarm	AR200/AR1200 with fixed 8FE interface does not support packets discarding.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
84	**STP**																					
85		MSTP	IEEE 802.1d (STP), 802.1w (RSTP), 802.1s (MSTP)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
86		MSTP security		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
87	**LLDP**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
88	**WAN**																					
89	**Port management**																					
90		Port isolation																				
91			Support port isolation modes: (1) Layer 2 and Layer 3 service isolated. (2) Layer 2 service isolation and Layer 3 services not isolated.	√(Layer 3 isolation is not supported.)																		
92			Port isolation group	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
93			Unidirectional isolation	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
94	**WAN**																					
95		LAN interface	Supporting EthernetII, SNAP, and	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
96		ADSL interface		X	X	X	√	√	√	√	√	X	X	X	X	√	√	√	√	√	√	√
97			The ADSL line complies with ADSL2 (G992.3), ADSL2+ (G992.5), G.DMT (G992.1), and T1.413 standards.	X	X	X	√	√	√	√	√	X	X	X	X	√	√	√	√	√	√	√
98			Compatible with Annex A, B, C, and M modes	X	X	X	√	√	√	√	√	X	X	X	X	√	√	√	√	√	√	√
99			Supporting ATM packet mode	X	X	X	√	√	√	√	√	X	X	X	X	√	√	√	√	√	√	√
100		G.SHDSL interface		X	X	X	X	X	X	X	X	√	√	X	X	X	X	X	X	X	X	√
101			Setting the ATM/PTM working mode of the SHDSL board	X	X	X	X	X	X	X	X	√	√	X	X	X	X	X	X	X	X	√
102			Setting the SHDSL standard: supporting G991.2 and G991.2 (Bis).	X	X	X	X	X	X	X	X	√	√	X	X	X	X	X	X	X	X	√
103	**Interface backup**																					
104		Interface backup	Configuring a dialer interface as a backup interface, Setting load balancing mode of backup interfaces	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
105		Association test on interface backup	Configuring association between interface backup and routing	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
106	**Bridge management**																					
107		Transparent bridge																				
108			Configuring a static MAC address for a bridge group	√(VT or Dialer member interface cannot be configured.)																		
109			Blackhole MAC address entries	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
110			Type of packets that can be forwarded by bridge interfaces	EthernetII packets can be forwarded by bridge interfaces. Bridge interfaces do not support SNAP tagged packets or 802.3/802.2 IPX packets, or separately filter IP packets and non-IP packets.																		
111			Link encapsulation protocol on the member interface	Non-Ethernet interfaces support HDLC, PPP, FR, and ATM, but do not support X.25.																		
112			Member interface type: Serial interfaces (HDLC and PPP) FR interfaces and sub-interfaces ATM interfaces and sub-interfaces Eth interfaces and sub-interfaces VLANIF interfaces Dialer interfaces MFR interfaces and sub-interfaces MP interfaces VT interfaces (PPPoFR and PPPoE)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
113			Physical interfaces: Eth, E1/T1, SA, xDSL and ISDN interfaces	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
114	**Logical interface**		Support Dialer interface, loopback interface, NULL interface, VT interface, VE interface, MP-Group interface, MFR interface, tunnel interface, Bridge-if interface, and Ethernet sub-interface	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
115	**ATM**																					
116			Supporting P2P and P2MP sub-interfaces.	X	X	X	√	√	√	√	√	√	√	X	X	√	√	√	√	√	√	√
117			Carrying the IPoEoA service	X	X	X	√	√	√	√	√	√	√	X	X	√	√	√	√	√	√	√
118			Carrying the IPoA service	X	X	X	√	√	√	√	√	√	√	X	X	√	√	√	√	√	√	√
119			PPP and PPPoE over PVC	X	X	X	√	√	√	√	√	√	√	X	X	√	√	√	√	√	√	√
120			InARP	X	X	X	√	√	√	√	√	√	√	X	X	√	√	√	√	√	√	√
121			CC, Loopback, AIS/RDI, and ATM ping	X	X	X	√	√	√	√	√	√	√	X	X	√	√	√	√	√	√	√
122			PVC group	X	X	X	√	√	√	√	√	√	√	X	X	√	√	√	√	√	√	√
123	**DCC**		Route backup, circular DCC, resource-shared DCC, DCC call, DCC dialer interface, and DCC dialer list	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
124	**PPPoE**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
125	**PPP**																					
126		PPP	PPPoE, PPPoA, PPPoEoA, PPPoFR, and PPPoISDN services	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
127		MP	MPoFR and MPoISDN services	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
128	**3G**	3G		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
129	**IP**																					
130	**NAT**																					
131		Basic NAT																				
132			PAT address pool mode	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
133			NOPAT address pool mode (supporting TCP, UDP, and ICMP)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
134			Easy IP mode (supporting TCP, UDP, and ICMP)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
135			Overlapping NAT (supporting TCP, UDP, ICMP, and other special protocol connections)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
136		NAT ALG	DNS, DNS mapping, FTP, ICM, RTSP, and SIP	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
137		Log	Log recording mode, log recording format, and flow logs.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
138	**NetStream**		Original stream, flexible stream, aggregated stream, and stream	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
139	**ARP**																					
140		Basic ARP																				
141			Static ARP entries for main interfaces Static ARP entries for VLANIF interfaces Static ARP entries for dot1q termination interfaces	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
142			ARP-related functions of a Layer 3 VPN	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
143			Layer 2 topology detection	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
144			Address conflict detection	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
145			Classification statistics of ARP packets	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

No.	Sub-system	Item	Specification	Model																		
				AR151	AR151W-P	AR151G-HSPA+7	AR156	AR157	AR157W	AR157VW	AR157G-HSPA+7	AR158E	AR158EVW	AR201	AR201VW-P	AR206	AR207	AR207V	AR207V-P	AR207VW	AR207G-HSPA+7	AR208E
146		ARP proxy	ARP proxy anti-attack, route gateway proxy, intra-VLAN proxy, and inter-VLAN proxy	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
147		ARP ping	ARP ping IP address and ARP ping MAC address	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
148	**IPv4 protocol stack**																					
149		IPv4 forwarding		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
150		IP options		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
151		TCP, UDP, and ICMP		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
152		Socket		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
153		Ping	IP ping and VRF ping	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
154		Source address verification	Authenticating the source address of the IP packets and discarding packets with invalid addresses	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
155		TRACERT	IP tracert and VRF tracert	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
156		Broadcast packet	Controlling whether to forward broadcast packets on a specified	√ (Only the host IP protocol stack forwarding is supported)																		
157		Forwarding load balancing	Equal-cost multipath (ECMP)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
158		Resetting the DF field	Configuring an outbound interface to fragment IP packets	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
159		Policy-based routing	Local policy routes, loading balancing of policy routes	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
160	**IPv6 protocol stack**																					
161		IPv6 forwarding		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
162		TCP6, UDP6, ICMP6		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
163		Socket6		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
164		PING6		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
165		TRACERT6		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
166		IPV6 PMTU		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
167		ND		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
168	**IPv6 transition**																					
169		6over4 tunnel	Supporting 6over4 manual tunnels, 6over4GRE tunnels, IPv4-compatible address automatic tunnels, 6to4 tunnels, 6to4 tunnel trunks, and ISATAP tunnels	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
170		4over6 tunnel	Supporting 4over6 tunnels, and setting the traffic label value for a tunnel, the hop limit value for a tunnel, the traffic level for a tunnel, and the encapsulation limit value	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
171	**DNS**																					
172		DNS Client	Configuring the DNS server statically and dynamically obtaining the DNS server address	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
173		DNS		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
174		DDNS		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
175		DNS6 Client		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
176		DNS6 Proxy/Relay		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
177	**VRRP**																					
178		IPv4 VRRP		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
179			VRRP backup and VRRP load	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
180			Supporting simple authentication /MD5 authentication	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
181			VRRP in an L3 VPN	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
182			VRRP in a super-VLAN	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
183			VRRP detect NQA detection status	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
184			VRRP detect attainability of single route	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
185		VRRP6		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
186		VRRP6 association		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
187		VRRP association		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
188		BFD and BFD applications		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
189	**NQA**																					
190		ICMP/UDP/TCP/SNMP/FTP/HTTP UDP jitter test/DHCP/Trace/DNS test	Supporting command line/MIB configuration	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
191		NQA server		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
192	**DHCP**																					
193		DHCP relay		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
194			WAN-side Layer 3 interfaces: Ethernet interfaces and sub-interfaces, Eth-Trunk main interfaces and sub-interfaces (QinQ sub-interfaces are not supported). LAN-side Layer 3 interfaces: VLANIF interfaces and super-VLAN interfaces.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
195			DHCP servers in a VPN	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
196		DHCP server		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
197			WAN-side Layer 3 interfaces: Ethernet interfaces and sub-interfaces, Eth-Trunk main interfaces and sub-interfaces (QinQ sub-interfaces are not supported). LAN-side Layer 3 interfaces: VLANIF interfaces and super-VLAN interfaces.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
198		DHCP security	Restricting the rate of DHCP packets by entire equipment, by port, by VLAN, and restricting the rate of dynamic DHCP packets	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
199		DHCP Client	WAN-side Layer 3 interfaces: Ethernet interfaces and sub-interfaces, Eth-Trunk main and sub-interfaces, and VE interfaces. (QinQ sub-interfaces are not supported)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
200	**DHCPv6**																					
201		DHCPv6 Client		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
202		DHCPv6 Relay		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
203		DHCPv6		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
204	**IP accounting**		Supporting IP packet statistics, IP priority statistics, and IP packet statistics based on the filtering rule	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
205	**UDP helper**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
206	**Unicast route**																					
207	**Unicast route management**																					
208		IPV4 and IPV6 routing table management	Route selection, limit of routing table capacity, load balancing, route selection, and priority-based route convergence	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
209		FIB4 and FIB6	Supporting IPv4 FIB	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
210		IP FRR	Supporting manual IP FRR of the public network, manual IP FRR for the private network, and IP Auto FRR for the private network	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
211	**route policy**																					
212		Routing policy filter	ACL, ip-prefix, community-filter, extcommunity-filter, as-path-filter, or rd-filter can be used as a route filter.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
213		route-policy	Route-policy configuration, if-match rule, actions of the apply policy, and universal match rule	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
214	**Static routes**	Static IPv4 and IPV6 routes	Specified outbound interface, load balancing, and configuration of static routes on a private network	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

No.	Sub-system	Item	Specification	Model																		
				AR151	AR151W-P	AR151G-HSPA+7	AR156	AR157	AR157W	AR157VW	AR157G-HSPA+7	AR158E	AR158EVW	AR201	AR201VW-P	AR206	AR207	AR207V	AR207V-P	AR207VW	AR207G-HSPA+7	AR208E
215	**RIP**		RIPv1/v2, RIPng	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
216	**OSPF**		OSPFv2, OSPFv3	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
217			Types of protocol interfaces: point-to-point, broadcast, NBMA, point-to-multipoint	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
218			Stub area and NSSA area	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
219	**IS-IS**		ISIS, ISISv6	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
220			Types of network interfaces: supports P2P networks and broadcast networks. NBMA networks are not supported and they can be supported only when NBMA networks are simulated as P2P networks. xDSL interfaces: IS-IS is not supported in PPPoA/IPoA links.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
221			Load balancing	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
222			Configuration of the three-way handshake negotiation mode	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
223			Packet authentication: simple plain-text authentication mode, HMAC MD5 authentication mode and keychain authentication mode	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
224			IPv4 multi-instance	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
225			IGP-BGP association and IGP-LDP association	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
226	**BGP**		BGP-4	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
227			BGP4+	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
228			MP-BGP	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
229	**SPR**		Smart Policy Route	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
230	**Multicast**																					
231	**Multicast**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
232	**MBGP**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
233	**IGMP**		IGMPv1/v2/v3	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
234	**IGMP Proxy**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
235	**PIM**																					
236		PIM-DM		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
237		PIM-SM		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
238		PIM-SSM		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
239	**MSDP**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
240	**Security**																					
241	**Firewall**																					
242		Packet filtering firewall	Packet filtering based on basic ACLs, advanced ACLs, and time range ACLs.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
243		ASPF																				
244			ASPF detection protocols: TCP/UDP/ICMP/FTP/HTTP/SIP/RTSP	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
245			Java blocking	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
246			ActiveX blocking	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
247			IP fragment packet detection	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
248			ACL-based PAM	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
249		Attack defense																				
250			Defense against ICMP redirection packets, ICMP unreachable packets, port scanning packets, Tracert attacks, land attacks, Smurf attacks, Fraggle attacks, WinNuke attacks, IP-fragment attacks, teardrop attacks, ping of death attacks, oversized ICMP packet attacks, malformed TCP packet attacks, and flood attacks.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
251			Limit on global connections (TCP, ICMP, UDP, fragment, and half connections), interzone connections, connections to a destination IP address, and connections from a source IP address.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
252			Static blacklist and static whitelist	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
253		Attack logs																				
254			Saving logs	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
255			Log format	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
256			Blacklist logs	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
257			Traffic alarm and alarm clearance logs	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
258			Attack defense logs	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
259			Packet filtering logs	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
260		Active/Standby mechanism																				
261			Supporting HSB service configuration and status maintenance	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
262			Supporting HSB group configuration and status maintenance	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
263			Recording logs when HSB channel disconnection occurs	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
264		Active/Standby firewall																				
265			Supporting firewall service information synchronization	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
266	**Access security**																					
267		802.1x authentication	IEEE 802.1x 2004	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
268			Interface/MAC address-based 802.1x authentication	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
269			EAPoL termination/relay authentication	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
270			Guest VLAN and restrict VLAN	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
271			VLAN and ACL information delivered by the RADIUS server	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
272			EAP-MD5 authentication and MAC address bypass authentication	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
273		Web authentication	Portal 2.0 and local Portal authentication	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
274		User access management																				
275			Supporting user group-based	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
276			Supporting user group bandwidth, VLAN, and user priority authorization	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
277			Supporting ACL, VLAN, UCL authorization by the RADIUS server	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
278			Supporting the MIB function of user groups	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
279		Attack log		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
280	**Storm suppression**		Interface-based broadcast traffic suppression, multicast traffic suppression, and unknown unicast traffic suppression	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
281	**ARP security**																					
282		ARP packet suppression																				
283			ARP packet suppression based on source IP addresses, global ARP packet suppression, and ARP packet suppression based on interfaces	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
284			ARP Miss packet suppression based on source IP addresses and global ARP Miss packet suppression	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
285			ARP packet rate limit based on the super VLAN	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
286			Limit on dynamic ARP entries	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
287			Strict ARP learning	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
288		ARP spoofing																				
289			Sending gratuitous ARP packets	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
290			ARP anti-spoofing mode: fixed-mac, fixed-all, and send-ack.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
291			ARP gateway anti-collision	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

No.	Sub-system	Item	Specification	Model																		
				AR151	AR151W-P	AR151G-HSPA+7	AR156	AR157	AR157W	AR157VW	AR157G-HSPA+7	AR158E	AR158EVW	AR201	AR201VW-P	AR206	AR207	AR207V	AR207V-P	AR207VW	AR207G-HSPA+7	AR208E
292	**IP security**																					
293		ICMP attack defense	Global ICMP packet suppression, Interface-based ICMP packet	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
294		uRPF		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
295		IPSG		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
296	**CPU-defend**																					
297		CPCAR		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
298		Blacklist		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
299		Attack source tracing		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
300	**AAA**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
301		Authentication	Supporting none authentication, local authentication, RADIUS authentication, HWTACACS authentication, PAP/CHAP authentication, EAP termination authentication, and EAP relay authentication	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
302		Authorization	Supporting none authorization, local authorization, HWTACACS authorization, and authorization after successful RADIUS authentication. One or more authorization modes can be used together	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
303		Accounting	Supporting none accounting, RADIUS accounting, and HWTACACS accounting	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
304		Command line authorization	Supporting command line authorization for management users, command line authorization using the HWTACACS server, and command line authorization in local mode	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
305	**RADIUS**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
306	**HWTACACS**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
307	**PKI**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
308	**VPN**																					
309	**GRE**																					
310		GRE tunnel	Supporting MTU, GRE Checksum, tunnel status detection, GRE packet fragmentation and reassembly, interface name used as the source address of the tunnel interface	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
311		Services on the GRE tunnel																				
312			Unicast routing protocols: RIP, OSPF, IS-IS, and BGP	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
313			Multicast routing protocol: PIM-DM/SM	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
314			Redirecting packets to the GRE tunnel	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
315	**IPSec VPN**																					
316		IKE	Supporting IKEv1/v2	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
317		IPSec																				
318			IPSec tunnel	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
319			IPSec conversion protocols: AH, ESP, and AH+ESP protocols.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
320			Encapsulation modes: transport mode and tunnel mode.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
321			GRE over IPSec	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
322		NAT traversal		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
323		DSVPN		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
324	**L2TP VPN**																					
325		LAC		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
326		LNS		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
327	**SSLVPN**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
328	**QoS**																					
329	**ACL**		Basic IPv4 ACLs, extended IPv4 ACLs, and Ethernet frame header-based Layer 2 ACLs and name ACLs	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
330	**QoS**																					
331		Priority		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
332		Traffic policing	Supporting traffic rate limit on interfaces, sub-interfaces, Eth-Trunk interfaces, MFR interfaces, dialer interfaces, VE interfaces, and VT virtual interfaces, and supporting flow-based	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
333		Traffic shaping	Supporting traffic shaping on interfaces, sub-interfaces, Eth-Trunk interfaces, MFR interfaces, dialer interfaces, VE interfaces, and traffic queues	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
334		Congestion avoidance	Supporting WRED based on DSCP or IP priorities and supporting tail drop	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
335		Congestion management	Supporting SP scheduling, WRR scheduling, and SP+WRR scheduling on LAN-side interfaces, and PQ/CBWFQ scheduling as well as 3-Level HQoS on WAN-side interfaces	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
336		HQoS		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
337			3-Level scheduling and shaping for flows, services (sub-interfaces), and	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
338		FR QoS		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
339		IPv6 QoS	Supporting IPv6 packet priority mapping, packet re-marking, queue scheduling, traffic policing, traffic shaping, traffic statistics, and traffic	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
340		ATM QoS	Configuring CBR, VBR-rt, VBR-nrt, and UBR on the PVC	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
341	**MQC**	Traffic classifier, traffic behavior, and		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
342	**SAC**	Smart Application Control	Supporting P2P, RTP, and enterprise applications	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
343	**Voice**																					
344	**Voice ports**																					
345		FXS ports	Supporting user-defined ringing mode, interface locking, and interface loopback. Supporting four access user types: DEL, ECPBX, LCPBX, and PAYPHONE	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
346		FXO ports																				
347			P2P and P2MP working modes	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
348			Remote power supplies on a port	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
349			Loopback on BRA ports	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
350		ISDN S/T ports	Working mode, remote power supplies on the ports and alarm checking on the BRA ports	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
351	**Voice media**																					
352		RTP		X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
353		DSP		X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
354			Three-way conference, Multi-party conference	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
355			DSP mode: Full rate mode and G.711 mode	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
356	**Voice signaling**																					
357		SIP protocol		X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
358			Supporting SIP over TLS	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
359	**Diagnostics and Maintenance**																					
360		Signaling tracing and		X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
361		Voice loading		X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
362		VQSM		X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
363		Remote packet capturing		X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
364		TR069	Supporting TR104 node	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
365	**SIP AG**																					

No.	Sub-subsystem	Item	Specification	Model																		
				AR151	AR151W-P	AR151G-HSPA+7	AR156	AR157	AR157W	AR157VW	AR157G-HSPA+7	AR158E	AR158EVW	AR201	AR201VW-P	AR206	AR207	AR207V	AR207V-P	AR207VW	AR207G-HSPA+7	AR208E
366		POTS subscriber		X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
367		BRA/PRA subscriber management		X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
368		Fax		X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
369		Modem		X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
370		SIP	SIP over UDP/TCP/SCTP	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
371		Overload		X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
372		BEST	Branch Exchange for Survivable	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
373		CAC bandwidth limit in static mode	Restricting incoming and outgoing calls when the bandwidth is insufficient	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
374	**PBX**																					
375		User access	Accessing the POTS terminal, SIP UE terminal, and BRA terminal	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
376		Trunk interworking		X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
377			Accessing the PSTN network/traditional TDM PBX by using AT0 and PRA	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
378			Accessing the IMS network by using a SIP IP trunk (SIP PRA or SIP AT0)	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
379			Connecting to other IP PBXs by using an SIP IP trunk (IP addresses cannot be obtained dynamically. And SIP IP trunk cannot be registered.)	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
380			R2 trunk	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
381			H323 Gateway	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
382			Accessing the ISDN network using the ISDN BRA trunk	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
383			3G CS Domain trunk	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
384		Service																				
385			Fax/modem service in TDM/VOIP mode	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
386			Connecting to the GSMBOX gateway (ZED-3 GSMBOX gateway) by using a SIP IP trunk	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
387			Double communication (DC) service and three-party service	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
388			Multi-subscriber-number (MSN) service supporting both SIP UE and POTS subscribers	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
389			Media proxy for NAT traversal	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
390			Multi-party conferencing	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
391			Blacklist and Whitelist	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
392			DISA	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
393			Restricting calls by setting the bandwidth in static mode	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
394		Operation and maintenance	PBX functions can be controlled by licenses.	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
395		Reliability	Associating the SIP server status with the VRRP status, and associating the SIP IP trunk status with the VRRP status	X	X	X	X	X	X	√	X	X	√	X	√	X	X	√	√	√	X	X
396	**Management and maintenance**																					
397	**Port mirroring**		Mirror packets to Ethernet interfaces (LAN-side interfaces and WAN-side interfaces), including: Ethernet interfaces, serial ports, ATM interfaces, E1/T1 interfaces, ISDN interfaces, 3G interfaces, WLAN interfaces, and Eth-Trunk interfaces. Supporting port mirroring on both inbound and outbound interfaces. Supporting port mirroring for traffic sent to the CPU.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
398	**Web Mangement**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
399	**System management**		SYSLOG log information export	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
400		TFTP		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
401		Information center		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
402		Command line		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
403		Time management		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
404		SSH		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
405		FTP		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
406		TELNET		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
407		User management		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
408		Multilingual resource file management		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
409		File system		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
410		Configuration file		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
411		Configuration management		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
412		Terminal management		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
413		Supporting console interfaces and synchronous/asynchronous serial interfaces	Supporting console interfaces and synchronous/asynchronous serial interfaces	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
414	**Upgrade management**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
415	**Device management**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
416	**GTL**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
417	**Diagnostics and Debugging**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
418	**SNMP**		SNMPv1/v2c/v3, supporting MIB files defined by SMIv1 and SMIv2	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
419	**PoE**		Supporting 802.3af and 802.3at. The interface maximum power is 30 W.	X	√	X	X	X	X	X	X	X	X	X	√	X	X	X	√	X	X	X
420	**NTP**		This module uses V3 that is compatible with V1 and V2.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
421	**RMON**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
422	**RMON2**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
423	**CWMP**			√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
424	**Deployment**		Downloading the configuration file, version file, and patch file from the TFTP/FTP server automatically Supporting USB-based deployment	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
425	**External interfaces**																					
426	**TR069 node**		Supporting TR111	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
427	**WLAN**																					
428	**WLAN QoS**																					
429		WMM function		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
430		Priority		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
431		Traffic control		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
432	**WLAN**																					
433		WEP security policy		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
434		WPA security policy		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
435		WAPI security policy		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
436		Key management		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
437	**WLAN radio management**																					

No.	Sub-system	Item	Specification	Model																		
				AR151	AR151W-P	AR151G-HSPA+7	AR156	AR157	AR157W	AR157VW	AR157G-HSPA+7	AR158E	AR158EVW	AR201	AR201VW-P	AR206	AR207	AR207V	AR207V-P	AR207VW	AR207G-HSPA+7	AR208E
438		Wireless protocol		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
439		Rate, channel, and bandwidth		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
440		MAC layer parameters		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
441		Radio		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
442		802.11n parameters		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
443	**AP management**																					
444		AP		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
445		Diagnosis and maintenance		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
446		VAP management		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
447	**WLAN STA management**																					
448		STA access		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
449		STA		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
450		STA information		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
451	**WLAN anti-attack**																					
452		Blacklist and whitelist		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
453		Access control		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
454		Anti-attack		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
455	**WLAN**																					
456		WLAN services		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
457		TR-069-based WLAN service		X	√	X	X	X	√	√	X	X	√	X	√	X	X	X	X	√	X	X
458	**WLAN (AC)**																					
459	**AP management**																					
460		Networking capability	Supporting the Layer 2/Layer 3 network and IPv4 network between APs and the AC	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
461		AC discovery	Discovering ACs using DHCP Option43, DNS, or CAPWAP	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
462		AP access	Configuring the AP access control mode (automatic access based on the MAC address or serial number)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
463		AP management	Querying AP software version update, configuration downloading, and status maintenance	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
464	**CAPWAP**																					
465		CAWAP tunnel	Supporting the CAPWAP control tunnel	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
466		Networking capability	Supporting Layer2/Layer 3 network data direct forwarding	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
467	**STA management**																					
468		STA access	Supporting 802.1x, Dot1x, Portal, EAP-PAP/EAP-MD5, EAP-PEAP/EAP-TLS, and MAC authentication	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
469		STA association	Supporting STA association and reassociation, and intra-VLAN or inter-VLAN roaming	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
470		AAA	Supporting AAA, VLAN and Layer 3 ACL delivery by the RADIUS server, and STA grouping and ACL	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
471	**WLAN radio management**																					
472		Radio management	Supporting 802.11 b/g/n	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
473		802.11n	Setting 802.11n parameters	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
474	**WLAN**																					
475		WEP security policy		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
476		WPA security policy		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
477		WAPI security policy		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
478		Key management		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
479	**WLAN attack defense**																					
480		Blacklist and whitelist	Supporting blacklist and whitelist, and viewing WLAN security feature logs and statistics	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
481		Communication control	STA communication control on a virtual AP	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
482	**WLAN QoS**																					
483		WMM function	Supporting 802.11e	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
484		Priority		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
485		CAR and rate limit	Supporting rate limit on upstream traffic of the VAP/SAT-based air interface, AP traffic control, and radio-based multi-STA traffic balancing	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
486	**WLAN**																					
487		Service management	Supporting configurations and management of the WLAN service sets and VAP, automatic service delivery and management, and the VDS bridge function	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
488		Reliability	Supporting 1+1 cold backup, 1+1 load balancing, and N+1/N+N cold backup between ACs	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

No.	Sub-system	Item	Specification	Model															
				AR1220	AR1220-DC	AR1220V	AR1220W	AR1220VW	AR1220L	AR2201-48FE	AR2202-48FE	AR2204	AR2220	AR2240			AR3260		
	System specifications																		
1		Main control system												SRU40	SRU60	SRU80	SRU40	SRU60	SRU80
2			Switching capacity of the system	8 Gbit/s	8 Gbit/s	8 Gbit/s	8Gbit/s	8 Gbit/s	8 Gbit/s	10 Gbit/s	10 Gbit/s	10 Gbit/s	32 Gbit/s	80 Gbps	80 Gbps	160 Gbps	80 Gbps	80 Gbps	160 Gbps
3			Memory (default/maximum)	512 M	512M	512M	512M	512M	512M	512M	512M	1G	2G	2G			2G		
4			Flash memory	256 M	256M	256M	256M	256M	256M	512M	512M	512M	16M	16M			16M		
5			Micro SD card memory (default/maximum)	0	0	0	0	0	0	0	0	0/4G	2/4G	2/4G			2/4G		
6			SIC slot	2	2	2	2	2	2	0	0	4	4	4			4		
7			WSIC slot(default/max)	0/1						0	0	0/2	2/4	2/4			2/4		
8			XSIC slot(default/max)	0	0	0	0	0	0	0	0	0	0/2	2/4			4/6		
9			DSP Channels	0	0	The 32-channel voice is supported by default.	0	The 32-channel voice is supported by default.	0	0	0	The MAX 32-channel voice is supported.	The MAX 128-channel voice can be supported.	The MAX 384-channel voice can be supported.			The MAX 384-channel voice can be supported.		
10			DSP slots	0	0	0	0	0	0	0	0	2	1	3			3		
11		Fixed interfaces																	
12			Fixed LAN port	8 FE					0	48 FE	48 FE	0	0	0			0		
13			Fixed WAN port	2 GE						2 GE(1 Combo port) 2 FE(supported by Ethernet switch port)	2 GE(1 Combo port) 2 FE(supported by Ethernet switch port)	3 GE(1 Combo por)	3 GE(1 Combo port)	3 GE(2 Combo ports)					
14			Wi-Fi port	X	X	X	802.11 b/g/n	802.11 b/g/n	X	X	X	X	X	X			X		
15			USB port (2.0)	2	2	2	2	2	2	1	1	2	2	2			2		
16			SD card port	0	0	0	0	0	0	0	0	1 (External)	2(Internal and	2(Internal and external)			2(Internal and external)		
17			USB console port	1	1	1	1	1	1	1	1	1	1	1			1		
18			AUX/Console port	1	1	1	1	1	1	1	1	1	1	1			1		
19			3G port	Supported by USB															
20			KingSton lock	√	√	√	√	√	√	X	X	X	X	X			X		
21			ESD wrist jack	√	√	√	√	√	√	√	√	√	√	√			√		
22		Power supply																	
23			Rated input voltage (AC)	AC: 100-240V 50/60Hz	-	AC: 100-240V 50/60Hz													
24			Maximum input voltage (AC)	AC: 85-264V 47/63Hz	-	AC: 85-264V 47/63Hz													
25			Rated input voltage (DC)	X	-42 to -53Vdc	X	X	X	X	-	-	-	–48 V to –60 V						
26			Maximum input voltage (DC)	X	-38.4 to -72Vdc	X	X	X	X	-	-	-	–38.4 V to –72 V						
27			Maximum power capacity	54 W	60 W	54 W	54 W	54 W	54 W	60 W	60 W	150 W	150 W	700 W for dual power supplies. Optionally, you can configure a single power supply 350 W.					
28			PoE (W)	X	X	External power 100 W. Only four fixed ports (FE4-FE7) are supported.			X	X	X	X	X	X			X		
29			Power supply redundancy	X	X	X	X	X	X	√ (RPS)	√ (RPS)	√ (RPS)	X	Y			Y		
30		Physical specifications																	
31			Dimensions (H x W x D)	With rack-mounting ear: 44.5 mm x 482.6 mm x 220 mm Without rack-mounting ear: 44.5 mm x 390 mm x 220 mm						With rack-mounting ear: 44.5 mm x 482.6 mm x 310 mm Without rack-mounting ear: 44.5 mm x 442 mm x 310 mm		With rack-mounting ear: 44.5 mm x 482.6 mm x 420 mm Without rack-mounting ear: 44.5 mm x 442 mm	With rack-mounting ear: 44.5 mm x 482.6 mm x 420 mm Without rack-mounting ear: 44.5 mm x 442 mm x 420 mm	With rack-mounting ear: 88.1 mm x 482.6 mm x 470 mm Without rack-mounting ear: 88.1 mm x 442 mm x 470 mm			With rack-mounting ear: 130.5 mm x 482.6 mm x 470 mm Without rack-mounting ear: 130.5 mm x 442 mm x 470 mm		
32			Weight	2.9KG						4.8KG	4.8KG	6 kg	4.95 kg	8.85 kg			11 kg		
33			Environment temperature	0-40℃															
34			Humidity	5% to 90%, non-condensing															
35		Reliability																	
36			Module hot swap	√	√	√	√	√	√	X	X	√	√	√			√		
37			Power module hot swap	X	X	X	X	X	X	X	X	X	√	√			√		
38			Fan module hot swap	X	X	X	X	X	X	X	X	X	X	√			√		
39			Main control board hot swap	X	X	X	X	X	X	X	X	X	X	√			√		
40			MTBF (year)	29.03967	29.03967	29.03967	29.03967	29.03967	29.03967	62.34	62.34	59.17	25.34	30.004			30.004		
41			MTTR (hour)	2	2	2	2	2	2	2	2	2	0.5	0.5			0.5		
42		Performance												SRU40	SRU60	SRU80	SRU40	SRU60	SRU80
43			Basic forwarding performance (64-byte packets)	450kpps	450kpps	450kpps	450kpps	450kpps	450kpps	350Kpps	350Kpps	450Kpps	1Mpps	2Mpps	2.5Mpps	4Mpps	2Mpps	2.5Mpps	4Mpps
44			NAT + ACL + QoS forwarding bandwidth (IMIX, bidirectional forwarding)	200M	200M	200M	200M	200M	200M	200M	200M	200M	400M	600M	800Mpps	1800M	600M	800Mpps	1800M
45			IPSec forwarding bandwidth (bps, IMIX, unidirectional forwarding)	200M	200M	200M	200M	200M	200M	200M	200M	200M	500M	1000M	1400M	2000M	1000M	1400M	2000M
46			FW forwarding bandwidth (bps, IMIX, unidirectional forwarding)	800M	800M	800M	800M	800M	800M	600M	600M	600M	1200M	4500M	5000M	5500M	4500M	5000M	5500M
47			MAC entry	2K	2K	2K	2K	2K	2K	2K	2K	2K	4K	4K	4K	8K	4K	4K	8K
48			ARP entry	2000	2000	2000	2000	2000	2000	2000	2000	2000	4000	4000	4000	4000	4000	4000	4000
49			Number of VLANs	128	128	128	128	128	128	128	128	128	4094	4094	4094	4094	4094	4094	4094
50			Number of IPv4 routes on a device	30000	30000	30000	30000	30000	30000	30000	30000	30000	80000	200000	400000	500000	200000	400000	500000
51			Number of FIB4 forwarding tables on a device	30000	30000	30000	30000	30000	30000	30000	30000	30000	80000	200000	400000	500000	200000	400000	500000
52			Number of IPv6 routes on a device	10000	10000	10000	10000	10000	10000	10000	10000	10000	30000	30000	30000	50000	30000	30000	50000
53			Number of FIB6 forwarding tables on a device	10000	10000	10000	10000	10000	10000	10000	10000	10000	30000	30000	30000	50000	30000	30000	50000
54			Maximum number of VRFs	64	64	64	64	64	64	64	64	64	128	256	256	1000	256	256	1000
55			Number of VPN routes on a device	10000	10000	10000	10000	10000	10000	10000	10000	10000	30000	30000	30000	100000	30000	30000	100000
56			Maximum number of MPLS labels (sharing the public/private network label)	1000	1000	1000	1000	1000	1000	1000	1000	1000	2000	2000	2000	8000	2000	2000	8000
57			Number of IPSec tunnels	2000	2000	2000	2000	2000	2000	2000	2000	2000	4000	4000	4000	6000	4000	4000	6000
58			Number of L2TP tunnels	128	128	128	128	128	128	128	128	128	512	512	512	1024	512	512	1024
59			Number of L2TP sessions	128	128	128	128	128	128	128	128	128	512	512	512	1024	512	512	1024
60			Number GRE tunnels	256	256	256	256	256	256	256	256	256	512	512	512	1024	512	512	1024
61			Maximum number of SSL VPN access	50	50	50	50	50	50	50	50	50	100	100	100	200	100	100	200
62			Maximum of concurrent SSL connections on a device	1024	1024	1024	1024	1024	1024	512	512	512	1024	1024	1024	2048	1024	1024	2048
63			Maximum number of configured ACLs	4K	4K	4K	4K	4K	4K	4K	4K	4K	8K	8K	8K	16K	8K	8K	16K
64			Maximum number of configured IPv6 ACLs	512	512	512	512	512	512	512	512	512	1024	1024	1024	2048	1024	1024	2048
65			Maximum number of NAT address pools	8	8	8	8	8	8	8	8	8	16	16	16	32	16	16	32
66			Number of IP addresses in each NAT address pool	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255
67			Maximum number of concurrent NAT connections	16K	16K	16K	16K	16K	16K	16K	16K	16K	64K	64K	64K	200K	64K	64K	200K
68			Maximum number of concurrent connections to the firewall	16K	16K	16K	16K	16K	16K	16K	16K	16K	64K	64K	64K	200K	64K	64K	200K
69			Maximum number of concurrent calls	-	-	125	-	125	-	-	-	125	250	1000	1000	2000	1000	1000	2000
70			Maximum of DSP channels (PBX and AG)	-	-	32	-	32	-	-	-	32	128	128 x 3	128 x 3	128 x 3	128 x 3	128 x 3	128 x 3
71			Maximum number of registered SIP UEs (PBX and AG BEST)	-	-	256	-	256	-	-	-	256	512	2048	2048	6144	2048	2048	6144
72			Rule set of the voice blacklist and whitelist	-	-	18	-	18	-	-	-	18	18	18	18	18	18	18	18
73			Maximum number of rules that can be configured for each blacklist and whitelist	-	-	64	-	64	-	-	-	64	64	64	64	64	64	64	64
74			Number of MPLS LDP VCs	64	64	64	64	64	64	64	64	64	128	256	256	512	256	256	512
75			Maximum number of 6over4 tunnels	256	256	256	256	256	256	256	256	256	512	512	512	1024	512	512	1024
76			Maximum number of 4over6 tunnels	256	256	256	256	256	256	256	256	256	512	512	512	1024	512	512	1024
77			Recommended number of APs that the AC can manage	12	12	12	12	12	12	12	12	12	16	16	16	32	16	16	32
78			Maximum number of concurrent users allowed by the AC	200	200	200	200	200	200	200	200	200	240	300	300	500	300	300	500
79	**Feature specifications**																		
80	**Ethernet port management**																		
81		Ethernet port	EthernetII packets(RFC 894), SNAP packets(802.3 SNAP)	√	√	√	√	√	√	√	√	√	√	√			√		
82		Link aggregation	IEEE 802.3ad	√	√	√	√	√	√	√	√	√	√	√			√		
83		LACP	Supports static LACP, M:N backup among member interfaces in an aggregation group	√	√	√	√	√	√	√	√	√	√	√			√		
84	**LAN access**																		
85	VLAN management																		
86		Basic VLAN	IEEE 802.1P, 802.1Q	√	√	√	√	√	√	√	√	√	√	√			√		
87		Interface link	Access, trunk, and hybrid	√	√	√	√	√	√	√	√	√	√	√			√		
88		VLAN aggregation	Super-VLAN and DHCP relay in a Super-VLAN	√	√	√	√	√	√	√	√	√	√	√			√		
89		Guest VLAN		√	√	√	√	√	√	√	√	√	√	√			√		
90		Voice VLAN		√	√	√	√	√	√	√	√	√	√	√			√		
91		GVRP		√	√	√	√	√	√	√	√	√	√	√			√		
92		VLANIF interface		√	√	√	√	√	√	√	√	√	√	√			√		
93	MAC address management																		
94		Static MAC address and dynamic MAC address		√	√	√	√	√	√	√	√	√	√	√			√		
95		MAC address		√	√	√	√	√	√	√	√	√	√	√			√		
96		Sticky MAC address		√	√	√	√	√	√	√	√	√	√	√			√		
97		MAC address flapping defense		√	√	√	√	√	√	√	√	√	√	√			√		
98		Invalid MAC address alarm	AR200/AR1200 with fixed 8FE interface does not support packets discarding.	√	√	√	√	√	√	√	√	√	√	√			√		
99	STP																		
100		MSTP	IEEE 802.1d (STP), 802.1w (RSTP), 802.1s (MSTP)	√	√	√	√	√	√	√	√	√	√	√			√		
101		MSTP security		√	√	√	√	√	√	√	√	√	√	√			√		
102	LLDP			√	√	√	√	√	√	√	√	√	√	√			√		
103	**WAN**																		

No.	Sub-system	Item	Specification	Model											
				AR1220	AR1220-DC	AR1220V	AR1220W	AR1220VW	AR1220L	AR2201-48FE	AR2202-48FE	AR2204	AR2220	AR2240	AR3260
104	Port														
105		Port isolation													
106			Support port isolation modes: (1) Layer 2 and Layer 3 service isolated. (2) Layer 2 service isolation and Layer 3 services not isolated.												
107			Port isolation group	√	√	√	√	√	√	√	√	√	√	√	√
108			Unidirectional isolation	√	√	√	√	√	√	√	√	√	√	√	√
109	WAN interface														
110		LAN interface	Supporting EthernetII, SNAP, and VLAN	√	√	√	√	√	√	√	√	√	√	√	√
111		Synchronous serial port		√	√	√	√	√	√	X	√	√	√	√	√
112			Configuring the serial port to work in synchronous/asynchronous mode	√	√	√	√	√	√	X	√	√	√	√	√
113			The synchronous serial port supports three link layer protocols: HDLC, FR, and PPP. The PPP protocol is used by default.	√	√	√	√	√	√	X	√	√	√	√	√
114			The asynchronous serial port support PPP encapsulation	√	√	√	√	√	√	X	√	√	√	√	√
115			Setting the maximum receive unit (MRU) The default value is 1500 bytes. The value ranges from 128 to 1500.	√	√	√	√	√	√	X	√	√	√	√	√
116		CE1/PRI		√	√	√	√	√	√	X	X	√	√	√	√
117			Working in E1, CE1, or PRI mode	√	√	√	√	√	√	X	X	√	√	√	√
118			Timeslot binding	√	√	√	√	√	√	X	X	√	√	√	√
119			Timeslot binding on the PRI interface	√	√	√	√	√	√	X	X	√	√	√	√
120		CT1 interface	ANSI T1.403, Timeslot binding on the CT1 interface	√	√	√	√	√	√	X	X	√	√	√	√
121		ADSL interface		√	√	√	√	√	√	X	X	√	√	√	√
122			The ADSL line complies with ADSL2 (G992.3), ADSL2+ (G992.5), G.DMT (G992.1), and T1.413 standards.	√	√	√	√	√	√	X	X	√	√	√	√
123			Compatible with Annex A, B, C, and M	√	√	√	√	√	√	X	X	√	√	√	√
124			Supporting ATM packet mode	√	√	√	√	√	√	X	X	√	√	√	√
125		G.SHDSL		√	√	√	√	√	√	X	X	√	√	√	√
126			Setting the ATM/PTM working mode of the SHDSL board	√	√	√	√	√	√	X	X	√	√	√	√
127			Setting the SHDSL standard: supporting G991.2 and G991.2 (Bis)	√	√	√	√	√	√	X	X	√	√	√	√
128		E1-F interface		√	√	√	√	√	√	X	√	√	√	√	√
129			Working in framed mode	√	√	√	√	√	√	X	√	√	√	√	√
130			Working in unframed mode	√	√	√	√	√	√	X	√	√	√	√	√
131			Configuring HDB3 as the encoding and decoding mode	√	√	√	√	√	√	X	√	√	√	√	√
132		E1-IMA	Complying with ITUT G.703 and HDB3 coding standards	√	√	√	√	√	√	X	X	√	√	√	√
133		T1-F interface		√	√	√	√	√	√	X	X	√	√	√	√
134			Working in framed mode	√	√	√	√	√	√	X	X	√	√	√	√
135			Setting transmission line attenuation	√	√	√	√	√	√	X	X	√	√	√	√
136			Timeslots binding on a T1-F interface	√	√	√	√	√	√	X	X	√	√	√	√
137			Configuring B8ZS as the encoding and decoding mode	√	√	√	√	√	√	X	X	√	√	√	√
138			Setting the line clock mode	√	√	√	√	√	√	X	X	√	√	√	√
139			Configuring a T1-F interface to invert user data	√	√	√	√	√	√	X	X	√	√	√	√
140		ISDN BRI		√	√	√	√	√	√	X	X	√	√	√	√
141			Setting the maximum receive unit (MRU)	√	√	√	√	√	√	X	X	√	√	√	√
142			Supporting remote loopback	√	√	√	√	√	√	X	X	√	√	√	√
143			Supporting local loopback	√	√	√	√	√	√	X	X	√	√	√	√
144		CPOS interface	Setting features of CPOS, E1, and T1 interfaces	X	X	X	X	X	X	X	X	X	√	√	√
145		POS	ITUT G.707 SONET OC-3/SDH STM-1	X	X	X	X	X	X	X	X	√	√	√	√
146		Asynchronous serial port		√	√	√	√	√	√	X	X	√	√	√	√
147			Setting the link-layer protocol	√	√	√	√	√	√	X	X	√	√	√	√
148			Configuring the stream working mode	√	√	√	√	√	√	X	X	√	√	√	√
149			Configuring the protocol working mode	√	√	√	√	√	√	X	X	√	√	√	√
150		Modem		√	√	√	√	√	√	X	X	√	√	√	√
151			Setting the call-in and call-out permissions	√	√	√	√	√	√	X	X	√	√	√	√
152			Auto-reply mode	√	√	√	√	√	√	X	X	√	√	√	√
153		xPON		√	√	√	√	√	√	X	X	√	√	√	√
154			GPON	√	√	√	√	√	√	X	X	√	√	√	√
155			EPON	√	√	√	√	√	√	X	X	√	√	√	√
156		VDSL2	Compatible with ANNEX A/M	√	√	√	√	√	√	X	X	√	√	√	√
157		3G interface (WCDMA)		√	√	√	√	√	√	X	X	√	√	√	√
158	x86 card														
159		SAE220		√	√	√	√	√	√	X	X	√	√	√	√
160		SAE550		X	X	X	X	X	X	X	X	X	√	√	√
161	Interface														
162		Interface backup	Configuring a dialer interface as a backup interface, Setting load balancing mode of backup interfaces	√	√	√	√	√	√	√	√	√	√	√	√
163		Association test on interface	Configuring association between interface backup and routing	√	√	√	√	√	√	√	√	√	√	√	√
164	Bridge management														
165		Transparent													
166			Configuring a static MAC address for a bridge group												
167			Blackhole MAC address entries	√	√	√	√	√	√	√	√	√	√	√	√
168			Type of packets that can be forwarded by bridge interfaces												
169			Link encapsulation protocol on the member interface												
170			Member interface type: Serial interfaces (HDLC and PPP) FR interfaces and sub-interfaces ATM interfaces and sub-interfaces Eth interfaces and sub-interfaces VLANIF interfaces Dialer interfaces MFR interfaces and sub-interfaces MP interfaces VT interfaces (PPPoFR and PPPoE)	√	√	√	√	√	√	√	√	√	√	√	√
171			Physical interfaces: Eth, E1/T1, SA, xDSL and ISDN interfaces	√	√	√	√	√	√	√	√	√	√	√	√
172	Logical interface		Support Dialer interface, loopback interface, NULL interface, VT interface, VE interface, MP-Group interface, MFR interface, tunnel interface, Bridge-if interface, and Ethernet sub-interface	√	√	√	√	√	√	√	√	√	√	√	√
173	ATM														
174			Supporting P2P and P2MP sub-interfaces.	√	√	√	√	√	√	X	X	√	√	√	√
175			Carrying the IPoEoA service	√	√	√	√	√	√	X	X	√	√	√	√
176			Carrying the IPoA service	√	√	√	√	√	√	X	X	√	√	√	√
177			PPP and PPPoE over PVC	√	√	√	√	√	√	X	X	√	√	√	√
178			InARP	√	√	√	√	√	√	X	X	√	√	√	√
179			CC, Loopback, AIS/RDI, and ATM ping	√	√	√	√	√	√	X	X	√	√	√	√
180			PVC group	√	√	√	√	√	√	X	X	√	√	√	√
181	Frame relay		FRoISDN, PPPoFR/PPPoMFR, and MPoFR	√	√	√	√	√	√	X	X	√	√	√	√
182	HDLC			√	√	√	√	√	√	X	X	√	√	√	√
183	DCC		Route backup, circular DCC, resource-shared DCC, DCC call, DCC dialer interface, and DCC dialer list	√	√	√	√	√	√	√	√	√	√	√	√
184	PPPoE			√	√	√	√	√	√	√	√	√	√	√	√
185	ISDN	DSS1	ITU-T Q.921, ITU-T Q.931 Supporting PRI interfaces	√	√	√	√	√	√	X	X	√	√	√	√
186	PPP														
187		PPP	PPPoE, PPPoA, PPPoEoA, PPPoFR, and PPPoISDN services	√	√	√	√	√	√	√	√	√	√	√	√
188		MP	MPoFR and MPoISDN services	√	√	√	√	√	√	√	√	√	√	√	√
189	3G	3G		√	√	√	√	√	√	√	√	√	√	√	√
190	**IP applications**														
191	NAT														
192		Basic NAT													
193			PAT address pool mode	√	√	√	√	√	√	√	√	√	√	√	√
194			NOPAT address pool mode (supporting TCP, UDP, and ICMP)	√	√	√	√	√	√	√	√	√	√	√	√
195			Easy IP mode (supporting TCP, UDP, and ICMP)	√	√	√	√	√	√	√	√	√	√	√	√
196			Overlapping NAT (supporting TCP, UDP, ICMP, and other special protocol	√	√	√	√	√	√	√	√	√	√	√	√
197		NAT ALG	DNS, DNS mapping, FTP, ICM, RTSP, and	√	√	√	√	√	√	√	√	√	√	√	√
198		Log	Log recording mode, log recording format, and flow logs.	√	√	√	√	√	√	√	√	√	√	√	√
199	NetStream		Original stream, flexible stream, aggregated stream, and stream collection	√	√	√	√	√	√	√	√	√	√	√	√
200	ARP														
201		Basic ARP													

No.	Sub-system	Item	Specification	Model											
				AR1220	AR1220-DC	AR1220V	AR1220W	AR1220VW	AR1220L	AR2201-48FE	AR2202-48FE	AR2204	AR2220	AR2240	AR3260
202			Static ARP entries for main interfaces Static ARP entries for VLANIF interfaces Static ARP entries for dot1q termination interfaces Static ARP entries in VPN-instance mode	√	√	√	√	√	√	√	√	√	√	√	√
203			ARP-related functions of a Layer 3 VPN	√	√	√	√	√	√	√	√	√	√	√	√
204			Layer 2 topology detection	√	√	√	√	√	√	√	√	√	√	√	√
205			Address conflict detection	√	√	√	√	√	√	√	√	√	√	√	√
206			Classification statistics of ARP packets	√	√	√	√	√	√	√	√	√	√	√	√
207		ARP proxy	ARP proxy anti-attack, route gateway proxy, intra-VLAN proxy, and inter-VLAN	√	√	√	√	√	√	√	√	√	√	√	√
208		ARP ping	ARP ping IP address and ARP ping MAC address	√	√	√	√	√	√	√	√	√	√	√	√
209	IPv4 protocol stack														
210		IPv4 forwarding		√	√	√	√	√	√	√	√	√	√	√	√
211		IP options		√	√	√	√	√	√	√	√	√	√	√	√
212		TCP, UDP, and ICMP		√	√	√	√	√	√	√	√	√	√	√	√
213		Socket		√	√	√	√	√	√	√	√	√	√	√	√
214		Ping	IP ping and VRF ping	√	√	√	√	√	√	√	√	√	√	√	√
215		Source address verification	Authenticating the source address of the IP packets and discarding packets with invalid addresses	√	√	√	√	√	√	√	√	√	√	√	√
216		TRACERT	IP tracert and VRF tracert	√	√	√	√	√	√	√	√	√	√	√	√
217		Broadcast packet	Controlling whether to forward broadcast packets on a specified interface	√ (Only the host IP protocol stack forwarding is supported)											
218		Forwarding load balancing	Equal-cost multipath (ECMP)	√	√	√	√	√	√	√	√	√	√	√	√
219		Resetting the DF field	Configuring an outbound interface to fragment IP packets	√	√	√	√	√	√	√	√	√	√	√	√
220		Policy-based routing	Local policy routes, loading balancing of policy routes	√	√	√	√	√	√	√	√	√	√	√	√
221	IPv6 protocol stack														
222		IPv6 forwarding		√	√	√	√	√	√	√	√	√	√	√	√
223		TCP6, UDP6, ICMP6		√	√	√	√	√	√	√	√	√	√	√	√
224		Socket6		√	√	√	√	√	√	√	√	√	√	√	√
225		PING6		√	√	√	√	√	√	√	√	√	√	√	√
226		TRACERT6		√	√	√	√	√	√	√	√	√	√	√	√
227		IPV6 PMTU		√	√	√	√	√	√	√	√	√	√	√	√
228		ND		√	√	√	√	√	√	√	√	√	√	√	√
229	IPv6 transition technology														
230		6over4 tunnel	Supporting 6over4 manual tunnels, 6over4GRE tunnels, IPv4-compatible address automatic tunnels, 6to4 tunnels, 6to4 tunnel trunks, and ISATAP tunnels	√	√	√	√	√	√	√	√	√	√	√	√
231		4over6 tunnel	Supporting 4over6 tunnels, and setting the traffic label value for a tunnel, the hop limit value for a tunnel, the traffic level for a tunnel, and the encapsulation limit value	√	√	√	√	√	√	√	√	√	√	√	√
232	DNS														
233		DNS Client	Configuring the DNS server statically and dynamically obtaining the DNS server	√	√	√	√	√	√	√	√	√	√	√	√
234		DNS proxy/relay		√	√	√	√	√	√	√	√	√	√	√	√
235		DDNS		√	√	√	√	√	√	√	√	√	√	√	√
236		DNS6 Client		√	√	√	√	√	√	√	√	√	√	√	√
237		DNS6		√	√	√	√	√	√	√	√	√	√	√	√
238	VRRP														
239		IPv4 VRRP		√	√	√	√	√	√	√	√	√	√	√	√
240			VRRP backup and VRRP load balancing	√	√	√	√	√	√	√	√	√	√	√	√
241			Supporting simple authentication /MD5 authentication	√	√	√	√	√	√	√	√	√	√	√	√
242			VRRP in an L3 VPN	√	√	√	√	√	√	√	√	√	√	√	√
243			VRRP in a super-VLAN	√	√	√	√	√	√	√	√	√	√	√	√
244			VRRP detect NQA detection status	√	√	√	√	√	√	√	√	√	√	√	√
245			VRRP detect attainability of single route	√	√	√	√	√	√	√	√	√	√	√	√
246		VRRP6		√	√	√	√	√	√	√	√	√	√	√	√
247		VRRP6 association		√	√	√	√	√	√	√	√	√	√	√	√
248		VRRP		√	√	√	√	√	√	√	√	√	√	√	√
249		BFD and BFD applications		√	√	√	√	√	√	√	√	√	√	√	√
250	NQA														
251		ICMP/UDP/TCP/SNMP/FTP/HTTP UDP jitter test/DHCP/Trace	Supporting command line/MIB configuration	√	√	√	√	√	√	√	√	√	√	√	√
252		NQA server		√	√	√	√	√	√	√	√	√	√	√	√
253	DHCP														
254		DHCP relay		√	√	√	√	√	√	√	√	√	√	√	√
255			WAN-side Layer 3 interfaces: Ethernet interfaces and sub-interfaces, Eth-Trunk main interfaces and sub-interfaces (QinQ sub-interfaces are not supported). LAN-side Layer 3 interfaces: VLANIF interfaces and super-VLAN interfaces.	√	√	√	√	√	√	√	√	√	√	√	√
256			DHCP servers in a VPN	√	√	√	√	√	√	√	√	√	√	√	√
257		DHCP server		√	√	√	√	√	√	√	√	√	√	√	√
258			WAN-side Layer 3 interfaces: Ethernet interfaces and sub-interfaces, Eth-Trunk main interfaces and sub-interfaces (QinQ sub-interfaces are not supported). LAN-side Layer 3 interfaces: VLANIF interfaces and super-VLAN interfaces.	√	√	√	√	√	√	√	√	√	√	√	√
259		DHCP security	Restricting the rate of DHCP packets by entire equipment, by port, by VLAN, and restricting the rate of dynamic DHCP packets	√	√	√	√	√	√	√	√	√	√	√	√
260		DHCP Client	WAN-side Layer 3 interfaces: Ethernet interfaces and sub-interfaces, Eth-Trunk main and sub-interfaces, and VE interfaces. (QinQ sub-interfaces are not supported)	√	√	√	√	√	√	√	√	√	√	√	√
261	DHCPv6														
262		DHCPv6 Client		√	√	√	√	√	√	√	√	√	√	√	√
263		DHCPv6 Relay		√	√	√	√	√	√	√	√	√	√	√	√
264		DHCPv6 Server		√	√	√	√	√	√	√	√	√	√	√	√
265	IP accounting		Supporting IP packet statistics, IP priority statistics, and IP packet statistics based on the filtering rule	√	√	√	√	√	√	√	√	√	√	√	√
266	UDP helper			√	√	√	√	√	√	√	√	√	√	√	√
267	**Unicast route**														
268	Unicast route management														
269		IPV4 and IPV6 routing table management	Route selection, limit of routing table capacity, load balancing, route selection, and priority-based route convergence	√	√	√	√	√	√	√	√	√	√	√	√
270		FIB4 and FIB6	Supporting IPv4 FIB	√	√	√	√	√	√	√	√	√	√	√	√
271		IP FRR	Supporting manual IP FRR of the public network, manual IP FRR for the private network, and IP Auto FRR for the private network	√	√	√	√	√	√	√	√	√	√	√	√
272	route policy														
273		Routing policy filter	ACL, ip-prefix, community-filter, extcommunity-filter, as-path-filter, or rd-filter can be used as a route filter.	√	√	√	√	√	√	√	√	√	√	√	√
274		route-policy	Route-policy configuration, if-match rule, actions of the apply policy, and universal	√	√	√	√	√	√	√	√	√	√	√	√
275	Static routes	Static IPv4 and IPV6 routes	Specified outbound interface, load balancing, and configuration of static routes on a private network	√	√	√	√	√	√	√	√	√	√	√	√
276	RIP		RIPv1/v2, RIPng	√	√	√	√	√	√	√	√	√	√	√	√
277	OSPF		OSPFv2, OSPFv3	√	√	√	√	√	√	√	√	√	√	√	√
278			Types of protocol interfaces: point-to-point, broadcast, NBMA, point-to-multipoint	√	√	√	√	√	√	√	√	√	√	√	√
279			Stub area and NSSA area	√	√	√	√	√	√	√	√	√	√	√	√
280	IS-IS		ISIS, ISISv6	√	√	√	√	√	√	√	√	√	√	√	√
281			Types of network interfaces: supports P2P networks and broadcast networks. NBMA networks are not supported and they can be supported only when NBMA networks are simulated as P2P networks. xDSL interfaces: IS-IS is not supported in PPPoA/IPoA links.	√	√	√	√	√	√	√	√	√	√	√	√
282			Load balancing	√	√	√	√	√	√	√	√	√	√	√	√
283			Configuration of the three-way handshake negotiation mode	√	√	√	√	√	√	√	√	√	√	√	√

No.	Sub-system	Item	Specification	Model											
				AR1220	AR1220-DC	AR1220V	AR1220W	AR1220VW	AR1220L	AR2201-48FE	AR2202-48FE	AR2204	AR2220	AR2240	AR3260
284			Packet authentication: simple plain-text authentication mode, HMAC MD5 authentication mode and keychain authentication mode	√	√	√	√	√	√	√	√	√	√	√	√
285			IPv4 multi-instance	√	√	√	√	√	√	√	√	√	√	√	√
286			IGP-BGP association and IGP-LDP	√	√	√	√	√	√	√	√	√	√	√	√
287	BGP		BGP-4	√	√	√	√	√	√	√	√	√	√	√	√
288			BGP4+	√	√	√	√	√	√	√	√	√	√	√	√
289			MP-BGP	√	√	√	√	√	√	√	√	√	√	√	√
290	SPR		Smart Policy Route	√	√	√	√	√	√	√	√	√	√	√	√
291	**Multicast route**														
292	Multicast route			√	√	√	√	√	√	√	√	√	√	√	√
293	MBGP			√	√	√	√	√	√	√	√	√	√	√	√
294	IGMP		IGMPv1/v2/v3	√	√	√	√	√	√	√	√	√	√	√	√
295	IGMP Proxy			√	√	√	√	√	√	√	√	√	√	√	√
296	PIM														
297		PIM-DM		√	√	√	√	√	√	√	√	√	√	√	√
298		PIM-SM		√	√	√	√	√	√	√	√	√	√	√	√
299		PIM-SSM		√	√	√	√	√	√	√	√	√	√	√	√
300	MSDP			√	√	√	√	√	√	√	√	√	√	√	√
301	IGMP-snooping		IGMP-snooping v1/v2/v3	X	X	X	X	X	X	√	√	√	√	√	√
302	MLD snooping		IGMP-snooping v1/v2/v3	X	X	X	X	X	X	√	√	√	√	√	√
303	**MPLS**														
304	MPLS-Stack														
305		MPLS on the public network		√	√	√	√	√	√	√	√	√	√	√	√
306			Assignment of consecutive labels and assignment of specified labels	√	√	√	√	√	√		√	√	√	√	√
307			Supporting dynamic assignment of LDP LSP labels, BGP LSP labels, and L3 VPN LSP labels. Dynamic assignment of RSVP LSP labels or L2VPN LSP labels or VPLS LSP labels are not supported.	√	√	√	√	√	√	√	√	√	√	√	√
308		Static LSP	support L3 VPN	√	√	√	√	√	√	√	√	√	√	√	√
309		MPLS QoS	Mapping in DiffServ mode on L3 VPNs (Supporting E-LSP, not supporting L-LSP)	√	√	√	√	√	√	√	√	√	√	√	√
310	LDP														
311		IPv4 LDP		√	√	√	√	√	√	√	√	√	√	√	√
312		LDP FRR	Supporting manual LDP FRR and LDP Auto FRR	√	√	√	√	√	√	√	√	√	√	√	√
313	L3 VPN														
314		MPLS/BGP VPN	Hub-Spoke VPN HoVPN L3 VPN users accessing the Internet Mutual access between local VPNs Inter-area option A, B, C Load balancing Filtering policy for VPN import/export routes	√	√	√	√	√	√	√	√	√	√	√	√
315		VPN FRR	Supporting manual VPN FRR and VPN Auto FRR	√	√	√	√	√	√	√	√	√	√	√	√
316	L2 VPN														
317		VLL	Supporting local CCC, SVC VLL, Martini VLL, and inter-domain Martini VLL	√	√	√	√	√	√	√	√	√	√	√	√
318		PWE3	Supporting the single-hop PW and ping and tracert detection modes	√	√	√	√	√	√	√	√	√	√	√	√
319	MPLS TE														
320		MPLS TE base		√	√	√	√	√	√	√	√	√	√	√	√
321		MPLS TE		√	√	√	√	√	√	√	√	√	√	√	√
322	**Security**														
323	Firewall														
324		Packet filtering firewall	Packet filtering based on basic ACLs, advanced ACLs, and time range ACLs.	√	√	√	√	√	√	√	√	√	√	√	√
325		ASPF													
326			ASPF detection protocols: TCP/UDP/ICMP/FTP/HTTP/SIP/RTSP	√	√	√	√	√	√	√	√	√	√	√	√
327			Java blocking	√	√	√	√	√	√	√	√	√	√	√	√
328			ActiveX blocking	√	√	√	√	√	√	√	√	√	√	√	√
329			IP fragment packet detection	√	√	√	√	√	√	√	√	√	√	√	√
330			ACL-based PAM	√	√	√	√	√	√	√	√	√	√	√	√
331		Attack defense													
332			Defense against ICMP redirection packets, ICMP unreachable packets, port scanning packets, Tracert attacks, land attacks, Smurf attacks, Fraggle attacks, WinNuke attacks, IP-fragment attacks, teardrop attacks, ping of death attacks, oversized ICMP packet attacks, malformed TCP packet attacks, and flood attacks.	√	√	√	√	√	√	√	√	√	√	√	√
333			Limit on global connections (TCP, ICMP, UDP, fragment, and half connections), interzone connections, connections to a destination IP address, and connections from a source IP address.	√	√	√	√	√	√	√	√	√	√	√	√
334			Static blacklist and static whitelist	√	√	√	√	√	√	√	√	√	√	√	√
335		Attack logs													
336			Saving logs	√	√	√	√	√	√	√	√	√	√	√	√
337			Log format	√	√	√	√	√	√	√	√	√	√	√	√
338			Blacklist logs	√	√	√	√	√	√	√	√	√	√	√	√
339			Traffic alarm and alarm clearance logs	√	√	√	√	√	√	√	√	√	√	√	√
340			Attack defense logs	√	√	√	√	√	√	√	√	√	√	√	√
341			Packet filtering logs	√	√	√	√	√	√	√	√	√	√	√	√
342		Active/Standby mechanism													
343			Supporting HSB service configuration and status maintenance	√	√	√	√	√	√	√	√	√	√	√	√
344			Supporting HSB group configuration and status maintenance	√	√	√	√	√	√	√	√	√	√	√	√
345			Recording logs when HSB channel disconnection occurs	√	√	√	√	√	√	√	√	√	√	√	√
346		Active/Standby firewall													
347			Supporting firewall service information synchronization	√	√	√	√	√	√	√	√	√	√	√	√
348	Access security														
349		802.1x authentication	IEEE 802.1x 2004	√	√	√	√	√	√	√	√	√	√	√	√
350			Interface/MAC address-based 802.1x authentication	√	√	√	√	√	√	√	√	√	√	√	√
351			EAPoL termination/relay authentication	√	√	√	√	√	√	√	√	√	√	√	√
352			Guest VLAN and restrict VLAN	√	√	√	√	√	√	√	√	√	√	√	√
353			VLAN and ACL information delivered by the RADIUS server	√	√	√	√	√	√	√	√	√	√	√	√
354			EAP-MD5 authentication and MAC address bypass authentication	√	√	√	√	√	√	√	√	√	√	√	√
355		MAC address authentication		X	X	X	X	X	X	√	√	√	√	√	√
356			User-based MAC address authentication	X	X	X	X	X	X	√	√	√	√	√	√
357		Web	Portal 2.0 and local Portal authentication	√	√	√	√	√	√	√	√	√	√	√	√
358		User access management													
359			Supporting user group-based authorization	√	√	√	√	√	√	√	√	√	√	√	√
360			Supporting user group bandwidth, VLAN, and user priority authorization	√	√	√	√	√	√	√	√	√	√	√	√
361			Supporting ACL, VLAN, UCL authorization by the RADIUS server	√	√	√	√	√	√	√	√	√	√	√	√
362			Supporting the MIB function of user groups	√	√	√	√	√	√	√	√	√	√	√	√
363		Attack log		√	√	√	√	√	√	√			√	√	√
364	Storm suppression		Interface-based broadcast traffic suppression, multicast traffic suppression, and unknown unicast traffic suppression	√	√	√	√	√	√	√	√	√	√	√	√
365	ARP security														
366		ARP packet suppression													
367			ARP packet suppression based on source IP addresses, global ARP packet suppression, and ARP packet suppression based on interfaces	√	√	√	√	√	√	√	√	√	√	√	√
368			ARP Miss packet suppression based on source IP addresses and global ARP Miss packet suppression	√	√	√	√	√	√	√	√	√	√	√	√
369			ARP packet rate limit based on the super	√	√	√	√	√	√	√	√	√	√	√	√
370			Limit on dynamic ARP entries	√	√	√	√	√	√	√	√	√	√	√	√
371			Strict ARP learning	√	√	√	√	√	√	√	√	√	√	√	√
372		ARP spoofing													
373			Sending gratuitous ARP packets	√	√	√	√	√	√	√	√	√	√	√	√
374			ARP anti-spoofing mode: fixed-mac, fixed-all, and send-ack.	√	√	√	√	√	√	√	√	√	√	√	√
375			ARP gateway anti-collision	√	√	√	√	√	√	√	√	√	√	√	√
376		DAI		X	X	X	X	X	X	√	√	√	√	√	√
377	IP security														
378		ICMP attack defense	Global ICMP packet suppression, Interface-based ICMP packet suppression	√	√	√	√	√	√	√	√	√	√	√	√
379		uRPF		√	√	√	√	√	√	√	√	√	√	√	√
380		IPSG		√	√	√	√	√	√	√	√	√	√	√	√
381		DHCP snooping	Supporting global, interface-based, and VLAN-based DHCP snooping. Supporting dynamic and static DHCP snooping binding tables.	X	X	X	X	X	X	√	√	√	√	√	√

No.	Sub-system	Item	Specification	Model											
				AR1220	AR1220-DC	AR1220V	AR1220W	AR1220VW	AR1220L	AR2201-48FE	AR2202-48FE	AR2204	AR2220	AR2240	AR3260
382		DHCPv6 Snooping	Supporting DHCP snooping globally, on an interface, and in a VLAN, and supporting dynamic and static DHCP snooping binding tables	X	X	X	X	X	X	√	√	√	√	√	√
383	CPU-defend														
384		CPCAR		√	√	√	√	√	√	√	√	√	√	√	√
385		Blacklist		√	√	√	√	√	√	√	√	√	√	√	√
386		Attack source tracing		√	√	√	√	√	√	√	√	√	√	√	√
387	AAA			√	√	√	√	√	√	√	√	√	√	√	√
388		Authentication	Supporting none authentication, local authentication, RADIUS authentication, HWTACACS authentication, PAP/CHAP authentication, EAP termination authentication, and EAP relay authentication	√	√	√	√	√	√	√	√	√	√	√	√
389		Authorization	Supporting none authorization, local authorization, HWTACACS authorization, and authorization after successful RADIUS authentication. One or more authorization modes can be used together	√	√	√	√	√	√	√	√	√	√	√	√
390		Accounting	Supporting none accounting, RADIUS accounting, and HWTACACS accounting	√	√	√	√	√	√	√	√	√	√	√	√
391		Command line authorization	Supporting command line authorization for management users, command line authorization using the HWTACACS server, and command line authorization in local mode	√	√	√	√	√	√	√	√	√	√	√	√
392	RADIUS			√	√	√	√	√	√	√	√	√	√	√	√
393	HWTACACS			√	√	√	√	√	√	√	√	√	√	√	√
394	PKI			√	√	√	√	√	√	√	√	√	√	√	√
395	**VPN**														
396	GRE														
397		GRE tunnel	Supporting MTU, GRE Checksum, tunnel status detection, GRE packet fragmentation and reassembly, interface name used as the source address of the tunnel interface	√	√	√	√	√	√	√	√	√	√	√	√
398		Services on the GRE tunnel													
399			Unicast routing protocols: RIP, OSPF, IS-IS, and BGP	√	√	√	√	√	√	√	√	√	√	√	√
400			Multicast routing protocol: PIM-DM/SM	√	√	√	√	√	√	√	√	√	√	√	√
401			Redirecting packets to the GRE tunnel	√	√	√	√	√	√	√	√	√	√	√	√
402	IPSec VPN														
403		IKE	Supporting IKEv1/v2	√	√	√	√	√	√	√	√	√	√	√	√
404		IPSec													
405			IPSec tunnel	√	√	√	√	√	√	√	√	√	√	√	√
406			IPSec conversion protocols: AH, ESP, and AH+ESP protocols.	√	√	√	√	√	√	√	√	√	√	√	√
407			Encapsulation modes: transport mode and tunnel mode.	√	√	√	√	√	√	√	√	√	√	√	√
408			GRE over IPSec	√	√	√	√	√	√	√	√	√	√	√	√
409		NAT traversal		√	√	√	√	√	√	√	√	√	√	√	√
410		DSVPN		√	√	√	√	√	√	√	√	√	√	√	√
411	L2TP VPN														
412		LAC		√	√	√	√	√	√	√	√	√	√	√	√
413		LNS		√	√	√	√	√	√	√	√	√	√	√	√
414	SSLVPN			√	√	√	√	√	√	√	√	√	√	√	√
415	**QoS**														
416	ACL		Basic IPv4 ACLs, extended IPv4 ACLs, and Ethernet frame header-based Layer 2 ACLs and name ACLs	√	√	√	√	√	√	√	√	√	√	√	√
417	QoS														
418		Priority mapping		√	√	√	√	√	√	√	√	√	√	√	√
419		Traffic policing	Supporting traffic rate limit on interfaces, sub-interfaces, Eth-Trunk interfaces, MFR interfaces, dialer interfaces, VE interfaces, and VT virtual interfaces, and supporting flow-based traffic policing	√	√	√	√	√	√	√	√	√	√	√	√
420		Traffic shaping	Supporting traffic shaping on interfaces, sub-interfaces, Eth-Trunk interfaces, MFR interfaces, dialer interfaces, VE interfaces, and traffic queues	√	√	√	√	√	√	√	√	√	√	√	√
421		Congestion avoidance	Supporting WRED based on DSCP or IP priorities and supporting tail drop	√	√	√	√	√	√	√	√	√	√	√	√
422		Congestion management	Supporting SP scheduling, WRR scheduling, and SP+WRR scheduling on LAN-side interfaces, and PQ/CBWFQ scheduling as well as 3-Level HQoS on WAN-side interfaces	√	√	√	√	√	√	√	√	√	√	√	√
423		HQoS		√	√	√	√	√	√	√	√	√	√	√	√
424			3-Level scheduling and shaping for flows, services (sub-interfaces), and interfaces	√	√	√	√	√	√	√	√	√	√	√	√
425		FR QoS		√	√	√	√	√	√	√	√	√	√	√	√
426		IPv6 QoS	Supporting IPv6 packet priority mapping, packet re-marking, queue scheduling, traffic policing, traffic shaping, traffic statistics, and traffic mirroring	√	√	√	√	√	√	√	√	√	√	√	√
427		ATM QoS	Configuring CBR, VBR-rt, VBR-nrt, and UBR on the PVC	√	√	√	√	√	√	√	√	√	√	√	√
428	MQC	Traffic classifier, traffic behavior, and traffic policy		√	√	√	√	√	√	√	√	√	√	√	√
429	SAC	Smart Application	Supporting P2P, RTP, and enterprise applications	√	√	√	√	√	√	√	√	√	√	√	√
430	**Voice**														
431	Voice ports														
432		FXS ports	Supporting user-defined ringing mode, interface locking, and interface loopback. Supporting four access user types: DEL, ECPBX, LCPBX, and PAYPHONE	X	X	√	X	√	X	X	X	√	√	√	√
433		FXO ports													
434			P2P and P2MP working modes	X	X	√	X	√	X	X	X	√	√	√	√
435			Remote power supplies on a port	X	X	√	X	√	X	X	X	√	√	√	√
436			Loopback on BRA ports	X	X	√	X	√	X	X	X	√	√	√	√
437		ISDN S/T ports	Working mode, remote power supplies on the ports and alarm checking on the BRA	X	X	√	X	√	X	X	X	√	√	√	√
438		E1 interfaces		X	X	√	X	√	X	X	X	√	√	√	√
439	Voice media														
440		RTP		X	X	√	X	√	X	X	X	√	√	√	√
441		DSP		X	X	√	X	√	X	X	X	√	√	√	√
442			Three-way conference, Multi-party	X	X	√	X	√	X	X	X	√	√	√	√
443			DSP mode: Full rate mode and G.711	X	X	√	X	√	X	X	X	√	√	√	√
444	Voice signaling														
445		SIP protocol		X	X	√	X	√	X	X	X	√	√	√	√
446			Supporting SIP over TLS	X	X	√	X	√	X	X	X	√	√	√	√
447	Diagnostics and Maintenance														
448		Signaling tracing and problems		X	X	√	X	√	X	X	X	√	√	√	√
449		Voice loading		X	X	√	X	√	X	X	X	√	√	√	√
450		VQSM		X	X	√	X	√	X	X	X	√	√	√	√
451		Remote packet capturing		X	X	√	X	√	X	X	X	√	√	√	√
452		TR069	Supporting TR104 node	X	X	√	X	√	X	X	X	√	√	√	√
453	SIP AG														
454		POTS subscriber		X	X	√	X	√	X	X	X	√	√	√	√
455		BRA/PRA subscriber management		X	X	√	X	√	X	X	X	√	√	√	√
456		Fax		X	X	√	X	√	X	X	X	√	√	√	√
457		Modem		X	X	√	X	√	X	X	X	√	√	√	√
458		SIP	SIP over UDP/TCP/SCTP	X	X	√	X	√	X	X	X	√	√	√	√
459		Overload control		X	X	√	X	√	X	X	X	√	√	√	√
460		BEST	Branch Exchange for Survivable Telephony	X	X	√	X	√	X	X	X	√	√	√	√
461		CAC bandwidth limit in static	Restricting incoming and outgoing calls when the bandwidth is insufficient	X	X	√	X	√	X	X	X	√	√	√	√
462	PBX														
463		User access	Accessing the POTS terminal, SIP UE terminal, and BRA terminal	X	X	√	X	√	X	X	X	√	√	√	√

No.	Sub-system	Item	Specification	Model											
				AR1220	AR1220-DC	AR1220V	AR1220W	AR1220VW	AR1220L	AR2201-48FE	AR2202-48FE	AR2204	AR2220	AR2240	AR3260
464		Trunk													
465			Accessing the PSTN network/traditional TDM PBX by using AT0 and PRA trunks	X	X	√	X	√	X	X	X	√	√	√	√
466			Accessing the IMS network by using a SIP IP trunk (SIP PRA or SIP AT0)	X	X	√	X	√	X	X	X	√	√	√	√
467			Connecting to other IP PBXs by using an SIP IP trunk (IP addresses cannot be obtained dynamically. And SIP IP trunk cannot be registered.)	X	X	√	X	√	X	X	X	√	√	√	√
468			R2 trunk	X	X	√	X	√	X	X	X	√	√	√	√
469			H323 Gateway	X	X	√	X	√	X	X	X	√	√	√	√
470			Accessing the ISDN network using the ISDN BRA trunk	X	X	√	X	√	X	X	X	√	√	√	√
471			3G CS Domain trunk	X	X	√	X	√	X	X	X	X	X	X	X
472		Service function													
473			Fax/modem service in TDM/VOIP mode	X	X	√	X	√	X	X	X	√	√	√	√
474			Connecting to the GSMBOX gateway (ZED-3 GSMBOX gateway) by using a SIP IP trunk	X	X	√	X	√	X	X	X	√	√	√	√
475			Double communication (DC) service and three-party service	X	X	√	X	√	X	X	X	√	√	√	√
476			Multi-subscriber-number (MSN) service supporting both SIP UE and POTS	X	X	√	X	√	X	X	X	√	√	√	√
477			Media proxy for NAT traversal	X	X	√	X	√	X	X	X	√	√	√	√
478			Multi-party conferencing	X	X	√	X	√	X	X	X	√	√	√	√
479			Blacklist and Whitelist	X	X	√	X	√	X	X	X	√	√	√	√
480			DISA	X	X	√	X	√	X	X	X	√	√	√	√
481			Restricting calls by setting the bandwidth in static mode	X	X	√	X	√	X	X	X	√	√	√	√
482		Operation and maintenance	PBX functions can be controlled by licenses.	X	X	√	X	√	X	X	X	√	√	√	√
483		Reliability	Associating the SIP server status with the VRRP status, and associating the SIP IP trunk status with the VRRP status	X	X	√	X	√	X	X	X	√	√	√	√
484	**Management and maintenance**														
485	Port mirroring		Mirror packets to Ethernet interfaces (LAN-side interfaces and WAN-side interfaces), including: Ethernet interfaces, serial ports, ATM interfaces, E1/T1 interfaces, ISDN interfaces, 3G interfaces, WLAN interfaces, and Eth-Trunk interfaces. Supporting port mirroring on both inbound and outbound interfaces. Supporting port mirroring for traffic sent to the CPU.	√	√	√	√	√	√	√	√	√	√	√	√
486	Web			√	√	√	√	√	√	√	√	√	√	√	√
487	System management		SYSLOG log information export	√	√	√	√	√	√	√	√	√	√	√	√
488		TFTP		√	√	√	√	√	√	√	√	√	√	√	√
489		Information		√	√	√	√	√	√	√	√	√	√	√	√
490		Command line		√	√	√	√	√	√	√	√	√	√	√	√
491		Time		√	√	√	√	√	√	√	√	√	√	√	√
492		SSH		√	√	√	√	√	√	√	√	√	√	√	√
493		FTP		√	√	√	√	√	√	√	√	√	√	√	√
494		TELNET		√	√	√	√	√	√	√	√	√	√	√	√
495		User		√	√	√	√	√	√	√	√	√	√	√	√
496		Multilingual resource file management		√	√	√	√	√	√	√	√	√	√	√	√
497		File system		√	√	√	√	√	√	√	√	√	√	√	√
498		Configuration file management		√	√	√	√	√	√	√	√	√	√	√	√
499		Configuration management		√	√	√	√	√	√	√	√	√	√	√	√
500		Terminal management		√	√	√	√	√	√	√	√	√	√	√	√
501		Supporting console interfaces and synchronous/asynchronous serial interfaces	Supporting console interfaces and synchronous/asynchronous serial interfaces	√(Console serial interfaces include RJ45 and miniUSB interfaces cannot be used together)											
502	Upgrade management			√	√	√	√	√	√	√	√	√	√	√	√
503	Device management			√	√	√	√	√	√	√	√	√	√	√	√
504	GTL			√	√	√	√	√	√	√	√	√	√	√	√
505	Diagnostics and Debugging			√	√	√	√	√	√	√	√	√	√	√	√
506	SNMP		SNMPv1/v2c/v3, supporting MIB files defined by SMIv1 and SMIv2	√	√	√	√	√	√	√	√	√	√	√	√
507	PoE		Supporting 802.3af and 802.3at. The interface maximum power is 30 W.	X	X	√	√	√	X	√	√	√	X	X	X
508	NTP		This module uses V3 that is compatible with V1 and V2.	√	√	√	√	√	√	√	√	√	√	√	√
509	RMON			√	√	√	√	√	√	√	√	√	√	√	√
510	RMON2			√	√	√	√	√	√	√	√	√	√	√	√
511	CWMP			√	√	√	√	√	√	√	√	√	√	√	√
512	Deployment		Downloading the configuration file, version file, and patch file from the TFTP/FTP server automatically Supporting USB-based deployment	√	√	√	√	√	√	√	√	√	√	√	√
513	**External interfaces**														
514	TR069 node		Supporting TR111	√	√	√	√	√	√	√	√	√	√	√	√
515	**WLAN**														
516	WLAN QoS														
517		WMM function		X	X	X	√	√	X	X	X	X	X	X	X
518		Priority mapping		X	X	X	√	√	X	X	X	X	X	X	X
519		Traffic control		X	X	X	√	√	X	X	X	X	X	X	X
520	WLAN security														
521		WEP security policy		X	X	X	√	√	X	X	X	X	X	X	X
522		WPA security policy		X	X	X	√	√	X	X	X	X	X	X	X
523		WAPI security policy		X	X	X	√	√	X	X	X	X	X	X	X
524		Key		X	X	X	√	√	X	X	X	X	X	X	X
525	WLAN radio management														
526		Wireless		X	X	X	√	√	X	X	X	X	X	X	X
527		Rate, channel, and bandwidth		X	X	X	√	√	X	X	X	X	X	X	X
528		MAC layer parameters		X	X	X	√	√	X	X	X	X	X	X	X
529		Radio interfaces		X	X	X	√	√	X	X	X	X	X	X	X
530		802.11n parameters		X	X	X	√	√	X	X	X	X	X	X	X
531	AP														
532		AP management		X	X	X	√	√	X	X	X	X	X	X	X
533		Diagnosis and maintenance		X	X	X	√	√	X	X	X	X	X	X	X
534		VAP		X	X	X	√	√	X	X	X	X	X	X	X
535	WLAN STA management														
536		STA access		X	X	X	√	√	X	X	X	X	X	X	X
537		STA association		X	X	X	√	√	X	X	X	X	X	X	X
538		STA information statistics		X	X	X	√	√	X	X	X	X	X	X	X
539	WLAN anti-														
540		Blacklist and whitelist		X	X	X	√	√	X	X	X	X	X	X	X
541		Access control		X	X	X	√	√	X	X	X	X	X	X	X
542		Anti-attack		X	X	X	√	√	X	X	X	X	X	X	X
543	WLAN services														
544		WLAN services		X	X	X	√	√	X	X	X	X	X	X	X
545		TR-069-based WLAN service		X	X	X	√	√	X	X	X	X	X	X	X
546	**WLAN (AC)**														
547	AP														
548		Networking capability	Supporting the Layer 2/Layer 3 network and IPv4 network between APs and the AC	√	√	√	√	√	√	√	√	√	√	√	√
549		AC discovery	Discovering ACs using DHCP Option43, DNS, or CAPWAP	√	√	√	√	√	√	√	√	√	√	√	√
550		AP access	Configuring the AP access control mode (automatic access based on the MAC address or serial number)	√	√	√	√	√	√	√	√	√	√	√	√
551		AP management	Querying AP software version update, configuration downloading, and status maintenance	√	√	√	√	√	√	√	√	√	√	√	√
552	CAPWAP														
553		CAWAP tunnel	Supporting the CAPWAP control tunnel	√	√	√	√	√	√	√	√	√	√	√	√
554		Networking capability	Supporting Layer2/Layer 3 network data direct forwarding	√	√	√	√	√	√	√	√	√	√	√	√
555	STA														

No.	Sub-system	Item	Specification	Model											
				AR1220	AR1220-DC	AR1220V	AR1220W	AR1220VW	AR1220L	AR2201-48FE	AR2202-48FE	AR2204	AR2220	AR2240	AR3260
556		STA access	Supporting 802.1x, Dot1x, Portal, EAP-PAP/EAP-MD5, EAP-PEAP/EAP-TLS, and MAC authentication	√	√	√	√	√	√	√	√	√	√	√	√
557		STA association	Supporting STA association and reassociation, and intra-VLAN or inter-	√	√	√	√	√	√	√	√	√	√	√	√
558		AAA	Supporting AAA, VLAN and Layer 3 ACL delivery by the RADIUS server, and STA grouping and ACL authorization	√	√	√	√	√	√	√	√	√	√	√	√
559	WLAN radio management														
560		Radio	Supporting 802.11 b/g/n	√	√	√	√	√	√	√	√	√	√	√	√
561		802.11n	Setting 802.11n parameters	√	√	√	√	√	√	√	√	√	√	√	√
562	WLAN security														
563		WEP security policy		√	√	√	√	√	√	√	√	√	√	√	√
564		WPA security policy		√	√	√	√	√	√	√	√	√	√	√	√
565		WAPI security policy		√	√	√	√	√	√	√	√	√	√	√	√
566		Key		√	√	√	√	√	√	√	√	√	√	√	√
567	WLAN attack defense														
568		Blacklist and whitelist	Supporting blacklist and whitelist, and viewing WLAN security feature logs and statistics	√	√	√	√	√	√	√	√	√	√	√	√
569		Communication control	STA communication control on a virtual AP	√	√	√	√	√	√	√	√	√	√	√	√
570	WLAN QoS														
571		WMM function	Supporting 802.11e	√	√	√	√	√	√	√	√	√	√	√	√
572		Priority mapping		√	√	√	√	√	√	√	√	√	√	√	√
573		CAR and rate limit	Supporting rate limit on upstream traffic of the VAP/SAT-based air interface, AP traffic control, and radio-based multi-STA traffic balancing	√	√	√	√	√	√	√	√	√	√	√	√
574	WLAN service														
575		Service management	Supporting configurations and management of the WLAN service sets and VAP, automatic service delivery and management, and the VDS bridge function	√	√	√	√	√	√	√	√	√	√	√	√
576		Reliability	Supporting 1+1 cold backup, 1+1 load balancing, and N+1/N+N cold backup between ACs	√	√	√	√	√	√	√	√	√	√	√	√