ASCENT **☀**
Communication Technology

Multiservice Switching Router

ASR2900 Series

- **Gb ASIC Switching**

- **4 x GE Combo Port**

- **6 Expansion Slots**

- **High performance**

- **Highly expandable**

- **Energy saving**

- **Varied protocols**

- **Traffic management policies**

- **Flexible management and maintenance**

ASR2900 Series is the next-generation multi-functional switching router. It is designed to facilitate MSOs, data center operators to develop solutions for enterprise broadband and industrial dedicated network.

Ascent ASR2900 Series is configured with 4 gigabit Ethernet ports (TX or SFP), simple, efficient and economic, which can be linked with PIN/IPRAN access services perfectly. In addition, ASR2900 provides up to 6 expanded slots, equipped with common modules for Ethernet, V35, E1, POS, 3G/4G, so as to expand more services.

ASR2900 Series is equipped with the 64-bit dual-core processor with high performance gigabit ASIC switching chip, which enables the whole hardware platform to run on the high-speed Ethernet frame. The innovative design endows ASR with a super processing capability, providing a guarantee for upper-layer applications

Key Features

- 64-bit dual-core processor with specialized gigabit ASIC switching chip

- Strong expandability

- New-generation hardware chip reduces power consumption by 15 % to 20 %

- Supports L2 to L7 routing functions

- Supports varied QoS queues and scheduling techniques

- Supports Console, Telnet, SSH, and SNMP management tools

Specifications

ASR2900 Gigabit Ethernet Switch

Model	ASR2900-20	ASR2900-40
Interface		
CON	1 CON	1 CON
USB	1 USB2.0	1 USB2.0
WAN	2 GE Combo	4 GE Combo
	2 GE-TX	
Expanded slot	2+2(redundancy) HIC	2+2(redundancy)HIC
		+2 EIC
Performance/Storage		
PPS	1.5 Mpps	3 Mpps
NORFLASH	32 M	32 M
DRAM	1 GB	2 GB
Peripheral Parameters		
Power Supply	Built-in 100 V to 220 V AC	Hot-pluggable 100 V to 240 V dual AC
Power	Peak value ≤20 W	Peak value ≤60 W
Dimensions (W × D × H)	443 mm × 300 mm × 44 mm	443 mm × 300 mm × 88 mm
Operating Temperature	0 °C to +60 °C	0 °C to +60 °C
Operating Humidity	5 % to 95 % (non-condensing)	5 % to 95 % (non-condensing)

Software Features

Item	ASR2900-20/40
Link Protocols	
LAN	ARP, ARP proxy, Gratuitous ARP
WAN	PPP, Multilink-PPP, PPPoE (Client/Serv), HDLC etc.
Network Protocols	
Routing	Static routing, straight through routing, default routing
	RIPv1/v2, OSPFv2, BGPv4, BEIGRP(compatible with CISCO)
	PBR
	FastSwitch, Load-Balance
Multicast	IGMP

IP service	PIM-DM, PIM-SM, DVMRP	
	ICMP, TCP, UDP, IP	
	NAT, PAT, Port-MAP, Private-Service, ALG	
	Ping, TraceRoute, Nslookup	
	IP ACL, IMP filter, Fast-Access	
	DHCP Client/Serv/Relay	
	DNS, DNS host, DNS Proxy, DDNS (PeanutHull/DynDNS/CTC)	
	Keepalive, PDP(compatible with CISCO)	
	NetFlow, IP Accounting	
	TFTP Client/Serv, FTP Client	
	SNTP, job/schedule	
MPLS	VRF, MPLS VPN, etc.	
IPv6	IPv6(authenticate through IPv6 PhaseII)	
	IPv6 QoS	
	IPv6 transition: NAT-PT, IPv6 tunnel, 4over6	
	IPv6 tunnel: IPSec v6, GRE, 6to4, ISATAP	
	IPv6 routing: IPv6 static routing, RIPng, OSPFv3, BGP4+	

Reliability

Backup	Floating route backup
	Keepalive Ethernet remote monitoring
	VRRP
	Bandwidth based load sharing and backup
	Traffic based load balancing and backup
BFD	BFD for RIP, OSPF, BGP, MPLS, VRRP
	Fast switch

QoS

Queuing	FIFO, PQ, CQ, WFQ, CBWFQ
Features	GBSC, Layer7filter

Security

AAA	AAA
	Enable, local, Radius, Tacas
	PAP, CHAP, MS-CHAP
Firewall	SYN flood, UDP flood, ICMP flood
	ARP-Protection, ARP-SCAN, DHCP-Snooping
	Against Internet datagrams, including Ping of Death, Tear-drop, Land-Based, WinNuke, PingSweep, ARP attack, Spoofing, etc.
VPN	IKE, IPSec
	L2TP, PPTP, GRE
	VPN nest
Management	SNMP, SYSLOG, HTTP management
	CLI management, file system management
	Logging methods: Console port, Telnet/VTY, SSH, etc.

Ordering Information

Item	Description
ASR2900-20	ASR2900-20 Multi-service Router (1 CON, 1 USB2.0, 2 GE-Combo, 2 GE-TX, 2+2 (redundancy)HIC slots, built-in 220VAC power supply)
ASR2900-40	ASR2900-40 Multi-service Router (1 CON, 1 USB2.0, 4 GE-Combo, 2+2(redundancy) HIC slots, 2 EIC slots, dual AC power supply (hot plug)
HIC-1GE-TX/SFP	Single 10/100/1000M opto-electronic multiplex interface card (RJ45/SFP)
HIC-2GE-TX+SFP	Dual 100/1000M Ethernet interface card (RJ45+SFP)
DIC-8GES-TX	Octuple 10/100/1000M Ethernet interface card (RJ45)
HIC-4G-LTE	Single 4G-LTE access card, all mode compatibility
HIC-1E1B	Single, non-channelized E1-F interface card
HIC-2E1B	Dual, non-channelized E1-F interface card
HIC-1TB	Single synchronous high-speed general serial port card (V28/V35)
HIC-2TB	Dual synchronous high-speed general serial port card (V28/V35)

Contact Information

Ascent Communication Technology Ltd

AUSTRALIA
140 William Street, Melbourne
Victoria 3000, AUSTRALIA
Phone: +61-3-8691 2902

HONG KONG SAR
Unit 9, 12th Floor, Wing Tuck Commercial Centre
177 Wing Lok Street, Sheung Wan, HONG KONG
Phone: +852-2851 4722

CHINA
Unit 1933, 600 Luban Road
200023, Shanghai CHINA
Phone: +86-21-60232616

USA
2710 Thomes Ave
Cheyenne, WY 82001, USA
Phone: +1-203 816 5188

EUROPE
Pfarrer-Bensheimer-Strasse 7a
55129 Mainz, GERMANY
Phone: +49 (0) 6136 926 3246

VIETNAM
15 /F TTC Building, Duy Tan Street
Cau Giay Dist., Hanoi, VIETNAM
Phone: +84 243 795 5917

WEB: www.ascentcomtec.com

EMAIL: sales@ascentcomtec.com