

Leading the Intelligent IP Network

Industry's First 10GE-Port FlexE Slicing Router, Born for Cloudification

NetEngine A821 E

One-network bearer

Industry's only 10GE port FlexE slicing, and multi-service security isolation

One-hop cloud access

Cloud access upon network access, service provisioning within minutes, and intelligent selection of cloud access paths

Experience awareness

Real-time SLA visualization through IFIT, the industry's only in-band flow measurement technology

Plug and play

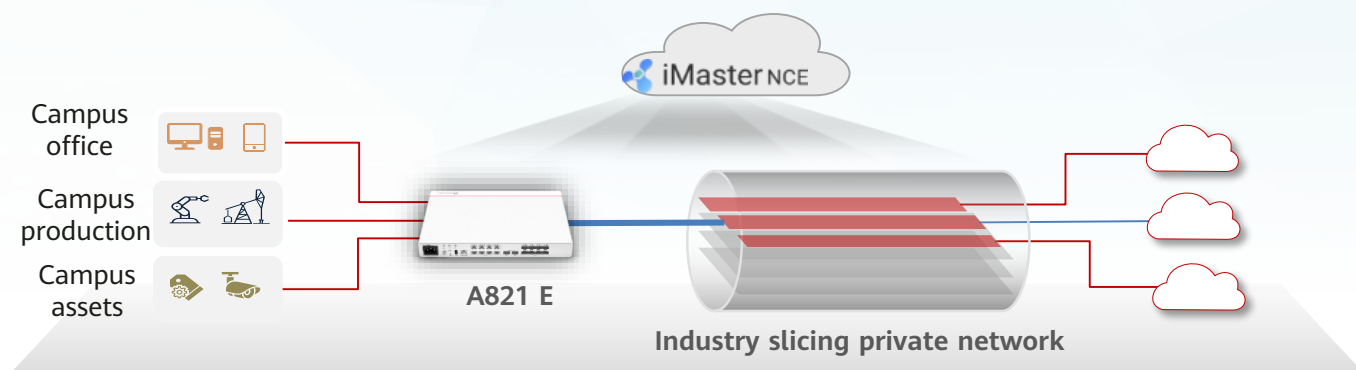
Single site visit, install-and-play, and automated service rollout



Product Introduction

Huawei's NetEngine A821 E is an enterprise-side router designed for the cloud era. It offers a wide range of advantages, such as easy deployment, simple O&M, high performance, and strong reliability, helping enterprises quickly access various networks. In addition, it can be managed and controlled by Huawei's iMaster NCE and supports features such as network slicing, SRv6, IFIT, L2VPN, L3VPN, EVPN, meeting fast and high-quality cloudification requirements of enterprises.

Application Scenario



Product Specifications

Specifications	Description
Dimensions (H x W x D)	43.6 mm (1U) x 320 mm x 220 mm
Cabinet depth	≥ 300 mm
Interface type	2 x 10GE + 8 x GE/FE (optical) + 8 x GE/FE (electrical)
Switching capacity	72 Gbit/s
Height	1U
Weight	2.7 kg
SDRAM	4 GB
Key components	The chip consists of the NP and ARM.
Typical power consumption	75 W
Power input	AC: 100 V to 240 V; DC: -40 V to -72 V
Heat dissipation mode	System air cooling
Operating temperature	-40°C to +65°C



Feature	Description
Network slicing	FlexE slicing of 10GE ports, supporting a minimum of 1 Gbit/s FlexE granularity
Service visibility	Flow-based detection IFIT
L2 function	IEEE802.1q, IEEE802.1p, IEEE 802.3ad, IEEE 802.1ab, and STP/RSTP/MSTP
L3 function	OSPF, RIP, IS-IS, BGP, AC, 6VPE, ARP, VLANIF, VXLAN, EVPN
Routing	<p>Routing protocols such as RIP, RIPng, OSPF, OSPFv3, IS-IS, IS-ISv6, BGP, BGPv6, static routing, IPv4 multicast, IPv6 multicast, and static multicast</p> <p>TCP/IP protocol family, such as ICMP, IP, TCP, UDP, socket (TCP/UDP/RAW IP), and ARP</p> <p>Static DNS, DNS client, FTP server, FTP client, and TFTP client</p> <p>DHCP relay and DHCP server</p>
MPLS	LDP, RSVP-TE, L2VPN, L3VPN, and seamless MPLS
Segment Routing	SR BE, SR Policy, SRv6 BE, SRv6 Policy, EVPN L3VPN, EVPN VPWS, and EVPN VPLS
Multicast	IGMP, static multicast routing, PIM-SM/SSM, and MBGP
Clock	1588v2, 1588 ATR, 1588 ACR
NAT	NAT44, NAT ALG, NAT internal server, NATP, and No-PAT
Security	IPsec, mirroring, ARP, BGP FlowSpec, DHCP, URPF, 802.1x, and loop detection
IPv4	<p>Tracert, NQA, IP policy-based routing, specified next hop forwarding based on flows, IP policy-based routing load balancing, QinQ interfaces (QinQ and dot1q tag termination sub-interfaces), IPv4 load balancing, and enabling/disabling the ping fast reply function based on the interface board</p> <p>Egress of an MPLS in UDP tunnel</p>
IPv6	IPv6 (ND), Path MTU (PMTU), TCP6, ping IPv6, tracert IPv6, socket IPv6, DHCPv6 relay, static IPv6 DNS, TFTP IPv6 client, IPv6 policy routing, and IPv6 ND fast reply
OAM	iFIT, IPFPM, NQA, TWAMP, BFD, MPLS OAM, MPLS-TP OAM, VRRP, Ethernet OAM, 802.3ah, Y.1731, Ethernet LPT, and bit error-triggered switching
QoS	QPPB, DifferServ, HQoS, and redirection