

# Huawei eKitEngine AR280 Enterprise-Grade 2.5GE Multi-Service Router Datasheet



Enterprise-Grade 2.5GE Multi-Service Router  
Make SME Network Easier and Smarter

## Product Overview

The Huawei eKitEngine AR280 is a high-performance enterprise-grade 2.5G multi-service router designed for small and medium-sized enterprises (SMEs).

It features a versatile port configuration, including one 2.5GE high-speed WAN port that can be switched to a LAN port and four GE electrical ports (among which GE1 is fixed as a LAN port, while GE2 to GE4 default to LAN ports and can be switched to WAN ports). This port design enables flexible networking and fulfills the requirements of diverse scenarios, such as retail stores, enterprise offices, budget hotels, primary and secondary schools, and real estate pre-installation environments.

The AR280 supports perpetual PoE that ensures uninterrupted power supply to connected devices even during system restarts, and offers broad compatibility with hundreds of non-standard terminals. Additionally, it integrates features including static routing, switching, WAC, PoE, load balancing, IPSec VPN, and online behavior management, delivering a highly cost-effective all-in-one solution.

## Product Highlights

- One 2.5GE high-speed WAN port that provides ultra-gigabit bandwidth
- Multiple LAN ports for higher scalability and support for diverse needs
- Support for perpetual PoE, compatible with 100+ non-standard terminals
- Integrating static routing, switching, WAC, PoE, load balancing, IPSec VPN, and application control in a single device

## Main Product Features

### Comprehensive functions in a single device

The AR280 supports LLDP power negotiation for enhanced PD compatibility, supplying power to over 100 non-standard terminals. This eliminates compatibility concerns and lowers total networking costs, offering superior value for enterprises. By integrating static routing, switching, WAC, PoE, load balancing, IPSec VPN, and online behavior management functions, the AR280 makes the network simpler, easier to manage, and more cost-effective.

### Diverse ports

- The AR280 provides a 2.5GE high-speed WAN port that supports broadband access at 2000 Mbit/s. This port can be flexibly configured as a LAN port for high-speed transmission between devices.
- It also comes with one fixed GE LAN port and three GE LAN/WAN interchangeable ports, presenting higher scalability.

### Application control

The AR280 offers application control, capable of accurately identifying over 500 common applications. It supports three flexible management modes: application blocking, priority assurance, and bandwidth control. Policies can be defined by effective time and date, and applied to specific IP addresses to guarantee the experience of critical services. This enables efficient network management and control, contributing to higher efficiency.

## IPSec VPN

The AR280 supports the IPSec VPN function, enabling the establishment of secure, encrypted communication channels between branches. This secures data transmitted across branch networks, enabling safe and reliable interconnectivity.

## Various management modes for easy O&M

The AR280 supports multiple management platforms, including HUAWEI eKit app, cloud platform, and EasyWeb, allowing you to manage network devices anytime and anywhere. Its cloud-based management mode can enable PSK and Portal authentication without the need for dedicated WACs or authentication servers, greatly simplifying networking and reducing CAPEX. In addition, the AR280 supports online network planning, deployment, inspection, and O&M on the Huawei SME Network cloud management platform.

## Product Specifications

	Item	AR280
Technical specifications	Dimensions (H x W x D)	35 mm x 195 mm x 130 mm (1.38 in. x 7.68 in. x 5.12 in.)
	Weight (including packaging materials)	1.29 kg (2.84 lb)
	Weight (excluding packaging materials)	0.93 kg (2.05 lb)
	Appearance & materials	Metal, white
	Port	GE electrical ports: GE1 is a dedicated LAN port. GE2, GE3, and GE4 are LAN ports by default and can be switched to WAN ports. 2.5GE electrical port: It is a WAN port by default and can be switched to a LAN port. <b>Note</b> If the 2.5 Gbit/s speed is required, the port must use an Ethernet cable of Cat5e or higher category.
LED indicator	It indicates the power-on, startup, running, alarm, and fault states of the system.	
Network performance	Maximum number of connected devices	≤ 150 <b>Note</b> The actual number of users varies according to the environment.
	Maximum number of connected APs	16
	Number of managed devices	32
	Maximum number of IPSec tunnels	16

Item		AR280
	VPN Forwarding performance	200 Mbps
	Egress bandwidth	2 Gbps <b>Note</b> This specification is obtained from the lab test result.
Power specifications	Rated input voltage	100–240 V AC; 50 Hz/60 Hz
	Input voltage range	90 V AC to 264 V AC, 45 Hz to 65 Hz
	Maximum power consumption	49 (PoE: 41 W)
	Power supply mode	AC power adapter
Environment specifications	Operating temperature	0°C–40°C <b>Note</b> When the altitude is 1800–5000 m (5906–16404 ft.), the highest operating temperature reduces by 1°C (1.8°F) every time the altitude increases by 220 m (722 ft.).
	Storage temperature	–40°C to +70°C
	Operating humidity	5% RH to 95% RH, non-condensing
	Altitude	< 5000 m
	Atmospheric pressure	53 kPa to 106 kPa

## Product Software Features

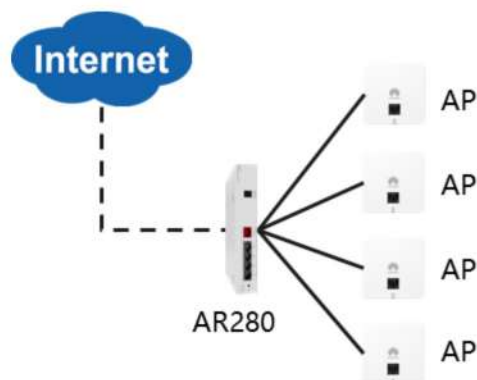
Item	Description
Interface basics	VLAN Port Up/Down detection Port auto-negotiation VLANIF interface
Ethernet basics	256 VLANs Port types: access, trunk, and hybrid Port-based VLAN assignment Automatic MAC address learning Automatic MAC address aging Static MAC address entry MAC address filtering
Network features	Policy-based routing (PBR) Terminal management Spanning Tree Protocol (STP)/Rapid Spanning Tree Protocol (RSTP)

Item	Description
	<p>Address Resolution Protocol (ARP)</p> <p>ARP security (configurable only on the web system)</p> <p>DNS client, sending DNS resolution requests</p> <p>DNS relay</p> <p>DHCP client, obtaining IP addresses through DHCP</p> <p>DHCP server</p> <p>IPv4 access control list (ACL)</p> <p>Application control</p> <p>Network address translation (NAT)</p>
VPN	IPSec VPN
System monitoring	<p>NQA (configurable only on the web system)</p> <p>Telemetry-based data collection</p>
WLAN features	<p>WLAN AP management</p> <p>WLAN radio management</p> <p>WLAN user management</p> <p>WLAN security</p> <p>WLAN QoS</p>
System management	<p>ThingsnP</p> <p>Network Configuration Protocol (NETCONF)</p> <p>HTTPS login to the device web system where administrators can manage and configure the device</p> <p>Network Time Protocol (NTP)</p> <p>Log center</p> <p>DHCP option-based deployment</p> <p>Power over Ethernet (PoE)</p> <p>Smart upgrade through the Huawei Online Upgrade Repository (HOUP)</p>
QoS features	Access control policies (packet filtering, traffic policing, redirection, re-marking, and traffic statistics collection)
Security features	<p>Authentication, Authorization, and Accounting (AAA)</p> <p>Storm suppression</p> <p>CPU defense</p> <p>Public Key Infrastructure (PKI)</p> <p>Application Specific Packet Filter (ASPF)</p> <p>Application Level Gateway (ALG), which is a NAT traversal technology</p> <p>Service and management isolation</p> <p>Host CPU attack defense</p> <p>802.1X authentication</p>
NMS	<p>HUAWEI eKit app and SNC platform (eKit public cloud)</p> <p>Web system, which provides a graphical user interface (GUI) for easy device</p>

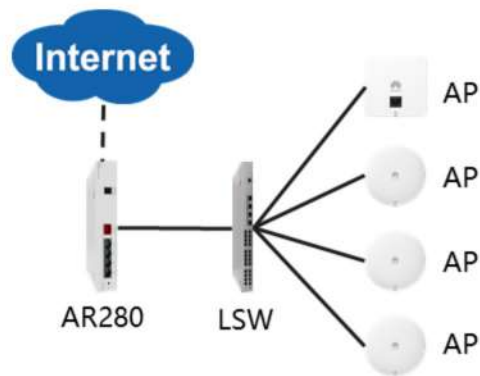
Item	Description
	management
IPv4 unicast routing	Static routing
WAN access	PPP protocol PPPoE client protocol Interface backup

## Typical Networking

AR280 + AP



AR280 + LSW + AP



## More Information

For more information about Huawei eKitEngine switches, visit <https://ekit.huawei.com/> or contact Huawei's local sales office. Alternatively, you can contact us through one of the following methods:

- Global service hotline: <http://e.huawei.com/en/service-hotline>
- Enterprise technical support website: <http://support.huawei.com/enterprise>
- Sending an email to the customer service mailbox: [support\\_e@huawei.com](mailto:support_e@huawei.com)

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