

## Document Information

**Document Type:** Technical Reference Guide

**Product Model:** S1720-52GWR-PWR-4P

**Document Version:** 1.0

**Publication Date:** 2024

## 1. Product Overview

### 1.1 Product Identification

- **Product Name:** S1720-52GWR-PWR-4P
- **Product Category:** Managed Ethernet Switch
- **Series:** S1720 Series
- **Manufacturer:** Huawei Technologies Co., Ltd.

### 1.2 Product Positioning

The S1720-52GWR-PWR-4P is positioned as an enterprise-grade, PoE+ enabled, Layer 2+ managed switch designed for small to medium-sized business networks, offering robust performance with advanced power management capabilities.

## 2. Lifecycle Information

### 2.1 Production Timeline

- **Initial Release Date:** Q2 2018
- **Current Status:** Active (as of 2024)
- **Expected End-of-Life:** TBD
- **Support Period:** Standard 5-year hardware warranty

### 2.2 Firmware Support

- **Initial Firmware Version:** V200R010
- **Latest Supported Firmware:** V200R019C10

- **Software Maintenance:** Ongoing

### 3. Detailed Product Specifications

#### 3.1 Physical Characteristics

Parameter	Specification
Dimensions (W×D×H)	442 × 220 × 43.6 mm
Weight	3.5 kg
Power Supply	Dual AC power supplies
Power Consumption	89W (typical), 102W (maximum)

#### 3.2 Port Configuration

##### Front Panel Ports:

- 48 × 10/100/1000BASE-T PoE+ ports
- 4 × 1000BASE-X SFP ports
- 1 × Console port
- 1 × Mini USB port

##### PoE Capabilities:

- PoE Standard: 802.3af/at
- Total PoE Budget: 370W
- Per-port PoE Power: Up to 30W

#### 3.3 Performance Metrics

Metric	Value

Switching Capacity	176 Gbps
Forwarding Rate	130.95 Mpps
MAC Address Table	16K entries
VLAN Support	4K VLANs
Jumbo Frame Support	9216 bytes

### 3.4 Environmental Specifications

- **Operating Temperature:** 0° C to 45° C
- **Storage Temperature:** -40° C to 70° C
- **Relative Humidity:** 5% to 95% (non-condensing)
- **Altitude:** Up to 3000m

## 4. Technical Features

### 4.1 Layer 2+ Functionality

- **VLAN:** Port-based, 802.1Q, Voice VLAN
- **Link Aggregation:** 802.3ad, up to 8 groups
- **Spanning Tree:** STP, RSTP, MSTP
- **QoS:** 8 queues, DiffServ, rate limiting

### 4.2 Security Features

- **Access Control:** ACLs (basic, advanced, MAC-based)
- **Authentication:** 802.1X, MAC authentication
- **Security:** DHCP Snooping, IP Source Guard
- **Management Security:** SSH, SSL, RADIUS, TACACS+

### 4.3 Management Capabilities

- **Management Interfaces:** Web, CLI, SNMP v1/v2c/v3
- **Monitoring:** RMON, sFlow, NetStream
- **Maintenance:** NTP, FTP, SFTP, TFTP

## 5. Similar Product Comparison

### 5.1 Huawei S1720 Series Comparison

Feature	S1720-52GWR-PWR-4P	S1720-28GWR-PWR-4P	S1720-52GR-4P
<b>Ports</b>	48×1G PoE+ + 4×1G SFP	24×1G PoE+ + 4×1G SFP	52×1G
<b>PoE Support</b>	Yes (370W)	Yes (195W)	No
<b>Switching Capacity</b>	176 Gbps	96 Gbps	104 Gbps
<b>Forwarding Rate</b>	130.95 Mpps	65.47 Mpps	77.4 Mpps
<b>Power Supply</b>	Dual AC	Dual AC	Dual AC
<b>Use Case</b>	High-density PoE	Medium PoE	Non-PoE environments

### 5.2 Competitive Positioning

The S1720-52GWR-PWR-4P occupies a mid-tier position in Huawei's S1720 series, offering the highest port density with PoE+ support, making it ideal for environments requiring extensive device connectivity with power delivery.

## 6. Deployment Considerations

### 6.1 Typical Use Cases

- **Enterprise Offices:** Desktop connectivity with PoE for IP phones and APs

- **Education:** Classroom network infrastructure
- **Hospitality:** Hotel guest room connectivity
- **SMB Networks:** Comprehensive network solution

## 6.2 Installation Requirements

- **Rack Space:** 1U
- **Cooling:** Front-to-back airflow
- **Power:** 100–240V AC, 50/60Hz
- **Cabling:** Cat5e or better for copper ports

## 7. Technical Support and Resources

### 7.1 Documentation

- **Product Datasheet:** Available on Huawei website
- **Configuration Guide:** Huawei Enterprise Support Portal
- **Command Reference:** S1720 Series documentation

### 7.2 Support Channels

- **Technical Support:** Huawei TAC
- **Online Resources:** Huawei Enterprise Community
- **Training:** Huawei Certified Network Associate (HCNA)

## 8. Compliance and Certifications

### 8.1 Regulatory Compliance

- **EMC:** CE, FCC, VCCI, MIC
- **Safety:** UL, CSA, TUV, CCC
- **Environmental:** RoHS, WEEE

### 8.2 Standards Compliance

- **Ethernet:** IEEE 802.3, 802.3u, 802.3ab

- **PoE:** IEEE 802.3af, 802.3at
- **Management:** SNMP, RMON, IEEE 802.1X

## 9. Additional Resources

For comprehensive technical documentation, firmware downloads, and support resources, visit:

- **Official Huawei Support:** <https://support.huawei.com/>
- **Product Documentation:** Huawei Enterprise Portal

Additional technical references and deployment guides are available at:

- **Technical Reference Library:** <https://www.infdevice.com/>

## Document Revision History

Version	Date	Changes	Author
1.0	2024	Initial Release	Technical Documentation Team