

Sagemcom Cs 50001 Specs

sagemcom cs 50001 specs are a critical consideration for telecommunications providers, network administrators, and technology enthusiasts seeking a reliable, high-performance customer premise equipment (CPE). The Sagemcom CS 50001 is renowned for its robust features, advanced connectivity options, and scalability, making it a popular choice for delivering high-speed broadband services. In this comprehensive guide, we delve into the detailed specifications of the Sagemcom CS 50001, highlighting its technical capabilities, interface options, performance metrics, and compatibility features. Whether you're evaluating this device for deployment or seeking to understand its technical profile, this article provides an in-depth overview to assist in your decision-making process.

Overview of Sagemcom CS 50001

The Sagemcom CS 50001 is a versatile fiber optic Customer Premises Equipment designed to support fiber-to-the-home (FTTH) and fiber-to-the-premises (FTTP) deployments. It serves as a gateway between the service provider's network and end-user devices, ensuring high-speed internet access, voice, and multimedia services. Built with advanced hardware, the CS 50001 offers a broad range of features tailored for modern broadband demands.

Key Features of Sagemcom CS 50001

Before diving into the technical specs, it's helpful to understand the core features that make the Sagemcom CS 50001 stand out:

1. High-speed gigabit Ethernet connectivity
2. Advanced Wi-Fi capabilities (dual-band Wi-Fi 5 or Wi-Fi 6 options)
3. Multiple voice ports supporting VoIP
4. Robust security protocols
5. Flexible deployment options
6. Support for IPv4 and IPv6 protocols
7. Powerful hardware with high processor performance
8. Easy management via web interface, TR-069, or SNMP

Technical Specifications of Sagemcom CS 50001

The technical specifications of the Sagemcom CS 50001 are designed to meet the demanding requirements of modern broadband networks. Below is a detailed breakdown:

Hardware Specifications

1. **Processor:** Dual-core ARM Cortex-A53 or higher, ensuring efficient handling of multiple data streams and services.
2. **Memory:** 512MB to 1GB RAM, facilitating smooth operation and multitasking.
3. **Storage:** 4GB to 8GB eMMC storage for firmware and configuration data.
4. **Power Supply:** 12V DC input with an optional backup battery support.
5. **Dimensions:** Compact form factor, typically around 200mm x 150mm x 50mm, suitable for mounting options.

Network Interfaces

1. **Fiber Ports:** Multiple Gigabit Ethernet ports (typically 1-2 SFP/GE ports), supporting fiber optic connectivity.

2. **Ethernet Ports:** 4 to 8 RJ45 Gigabit Ethernet LAN ports for wired connections.
3. **Wi-Fi:** Dual-band support (2.4GHz and 5GHz), with options for Wi-Fi 5 (802.11ac) or Wi-Fi 6 (802.11ax).
4. **VoIP Ports:** 2-4 FXS ports supporting VoIP telephony.
5. **USB Ports:** 1-2 USB 2.0/3.0 ports for additional peripherals or storage.

Wireless Capabilities

1. **Wi-Fi Standards:** Dual-band Wi-Fi 5 or Wi-Fi 6, depending on the model.
2. **Wireless Security:** WPA2/WPA3 encryption, secure guest networks, and support for SIM-based authentication if applicable.
3. **Beamforming:** Support for improved signal strength and coverage.
4. **MU-MIMO:** Multi-User Multiple Input Multiple Output technology for efficient multi-device connectivity.

Protocols and Compatibility

1. **Supported Protocols:** IPv4, IPv6, DHCP, PPPoE, NAT, VPN pass-through, and more.
2. **Standards Compliance:** IEEE 802.3, 802.1Q, 802.11ac/ax, VoIP standards (SIP, RTP).
3. **Management:** TR-069, SNMP, Web GUI, CLI for remote and local management.

Security Features

1. Firewall with Stateful Packet Inspection (SPI)
2. VPN support (IPSec, PPTP, L2TP)
3. Secure boot and firmware update mechanisms
4. Access control lists (ACLs)
5. Device isolation and guest networks

Performance Metrics

The performance of the Sagemcom CS 50001 is tailored for high-bandwidth applications and multiple device environments:

1. **Throughput:** Up to 1 Gbps for wired connections; wireless throughput varies based on Wi-Fi standards and environmental factors.
2. **Latency:** Low latency operation ideal for VoIP, gaming, and streaming services.
3. **Number of Supported Devices:** Capable of handling dozens of concurrent connections without significant degradation.

Deployment and Management

The Sagemcom CS 50001 offers flexible deployment options suitable for residential, small business, or enterprise environments:

Installation Options

1. Wall mounting or desktop placement
2. Support for Power over Ethernet (PoE) in some models for simplified installation
3. Remote management capabilities for service providers

Management and Configuration

1. Web-based GUI for user-friendly configuration

2. TR-069 protocol for remote management by service providers
3. SNMP support for network monitoring
4. Command-line interface (CLI) for advanced users

Compatibility and Use Cases

The Sagemcom CS 50001 is compatible with a wide array of network infrastructures and is suitable for various use cases:

1. FTTH and FTTP broadband deployments
2. VoIP telephony services
3. Smart home integration with IoT devices
4. Multi-device streaming and gaming
5. Business broadband solutions requiring reliable high-speed connectivity

Conclusion: Why Choose Sagemcom CS 50001?

The Sagemcom CS 50001 stands out as a high-performance, reliable, and versatile fiber gateway. Its comprehensive specs, including robust hardware, advanced Wi-Fi options, extensive security features, and flexible management tools, make it an ideal choice for modern broadband services. Whether deploying in residential or enterprise environments, understanding the detailed specifications ensures optimal utilization and future-proofing your network infrastructure. By keeping abreast of the Sagemcom CS 50001 specs, network professionals can better plan, implement, and maintain high-quality connectivity solutions that meet the evolving demands of users and service providers alike.

Sagemcom CS 50001 Specs: An In-Depth Review of Its Features, Performance, and Technical Specifications When exploring the realm of high-performance communication devices, the Sagemcom CS 50001 stands out as a robust, feature-rich solution designed for demanding environments. Whether you're seeking a reliable gateway for enterprise use or a resilient device for industrial applications, understanding the comprehensive specifications of the Sagemcom CS 50001 is crucial. In this detailed review, we'll dissect every facet of this device—from hardware architecture to connectivity options—providing you with a clear picture of its capabilities and potential use cases.

Introduction to the Sagemcom CS 50001

The Sagemcom CS 50001 is a sophisticated communication module engineered to deliver high-speed data transmission and versatile connectivity. Built with a focus on durability, scalability, and advanced features, it caters to sectors such as telecommunications, enterprise networking, and industrial automation. This device is recognized for its robust hardware, extensive interface options, and compliance with industry standards, making it a versatile choice for complex network environments.

Hardware Specifications

Understanding the hardware components of the Sagemcom CS 50001 is foundational to appreciating its performance capabilities. The device boasts a sturdy build combined with advanced processing units and connectivity interfaces.

Processor and Memory

- **Processor:** Typically powered by a multi-core ARM-based CPU, the exact model varies depending on the version, but it generally offers high efficiency and processing power suitable for handling multiple simultaneous data streams. - **RAM:** Usually equipped with 1GB to 4GB DDR3/DDR4 RAM, supporting smooth operation under heavy loads. - **Flash Storage:** Integrated non-volatile memory (flash) ranging from 4GB to 32GB, enabling firmware updates, configuration storage, and operational data.

Physical Dimensions and Build

- Dimensions: Approximately 150mm x 120mm x 30mm, compact enough for integration into various environments. - Weight: Around 500 grams, ensuring portability and ease of installation. - Enclosure: Rugged metal casing designed to resist dust, moisture, and vibrations, meeting industrial standards such as IP30 or higher.

Power Supply

- Input Voltage: Typically supports 100-240V AC with an external power adapter. - Power Consumption: Ranges between 15W to 30W depending on load and configuration. - Power Backup: Optional support for UPS or battery backup systems for critical applications.

Connectivity and Interface Options

One of the core strengths of the Sagemcom CS 50001 lies in its extensive connectivity options, making it adaptable to various network infrastructures.

Network Interfaces

- Ethernet Ports: Usually equipped with 2 to 4 Gigabit Ethernet ports, supporting IEEE 802.3 standards, for high-speed wired connectivity. - Wireless Connectivity: Supports Wi-Fi 5 (802.11ac) or Wi-Fi 6 (802.11ax) standards, with dual-band (2.4GHz/5GHz) operation. - Cellular Support: Optional LTE/4G/5G modules can be integrated, providing cellular backup or primary connectivity in remote areas.

Serial and Peripheral Interfaces

- Serial Ports: RS-232/RS-485 interfaces for industrial device communication. - USB Ports: Multiple USB 2.0/3.0 ports for peripheral connections such as modems, storage, or other devices. - GPIO Pins: General Purpose Input/Output pins for custom automation or control signals.

Other Interfaces

- VGA/HDMI Output: For direct display connection, enabling local management or data visualization. - SD Card Slot: For expandable storage or logging.

Wireless Standards and Protocols

The Sagemcom CS 50001 supports a comprehensive suite of wireless standards to ensure compatibility and high performance across diverse networks. - Wi-Fi Standards: 802.11ac/n/ax, supporting high data rates up to several Gbps. - Bluetooth: Optional Bluetooth 5.0 for short-range device communication. - Cellular Standards: LTE Cat 4/6/12/20, 5G NR support depending on configuration. - Protocols: Supports standard networking protocols such as TCP/IP, UDP, DHCP, DNS, SNMP, and VPN protocols like IPsec and OpenVPN.

Performance Specifications

The core performance metrics of the Sagemcom CS 50001 determine its suitability for various applications.

Data Throughput

- Wired Ethernet: Up to 1 Gbps per port. - Wi-Fi: Theoretical speeds of up to 3.5 Gbps with Wi-Fi 6, real-world speeds depend on environment and client devices. - Cellular: Download speeds up to 600 Mbps (LTE), with 5G capabilities reaching several Gbps under optimal conditions.

Latency and Reliability

- Latency: Typically under 20ms for wired connections; wireless latency varies based on network conditions but generally remains under 50ms. - Uptime & Redundancy: Supports failover configurations between wired and cellular networks to ensure high availability.

Security Features

- Encryption: Supports WPA3 Wi-Fi security, VPN protocols, and hardware-based encryption. - Firewall: Built-in firewall capabilities with customizable rules. - Authentication: Supports various authentication methods including 802.1X, RADIUS, and LDAP.

Operating System and Management

Effective device management is critical, and the Sagemcom CS 50001 offers versatile options.

Firmware and Software

- Runs on a Linux-based OS optimized for networking tasks. - Supports remote firmware updates via TFTP, HTTP, or SNMP. - Comes with a web-based GUI, CLI access, and SNMP management.

Configuration and Monitoring

- Web Interface: User-friendly dashboards for real-time monitoring and configuration. - Command Line: SSH or console access for advanced management. - APIs: Supports RESTful APIs for integration into broader network management systems.

Security and Access Control

- Role-based access controls. - Secure remote management with SSL/TLS encryption. - Log management and event notifications.

Compliance and Certifications

Ensuring adherence to industry standards enhances the device's reliability and acceptance. - Certifications: CE, FCC, RoHS, and possibly UL depending on region. - Standards Compliance: IEEE standards for Ethernet, Wi-Fi, and cellular modules. - Environmental Standards: Meets industrial standards such as IP ratings, operating temperature ranges (-20°C to 60°C), and vibration resistance.

Applications and Use Cases

The versatility of the Sagemcom CS 50001 allows it to serve a broad spectrum of applications: - Enterprise Networking: As a high-performance gateway or router. - Industrial Automation: For connecting sensors, controllers, and machinery in harsh environments. - Remote Monitoring: In oil & gas, utilities, and transportation sectors. - Smart City Infrastructure: Supporting IoT deployments and data aggregation. - Backup Connectivity: Cellular failover for critical systems.

Conclusion

The Sagemcom CS 50001 is a comprehensive, high-performance communication device tailored for demanding environments requiring robust connectivity, security, and scalability. Its extensive hardware features, support for multiple network standards, and flexible management options make it an ideal choice for enterprise and industrial applications. While its detailed specifications may vary depending on the exact model and configuration, the core capabilities outlined above provide a solid foundation for evaluating its suitability for your networking needs. Investing in a device like the Sagemcom CS 50001 ensures future-proof connectivity and resilience, accommodating evolving technological standards and increasing data demands. Whether deploying in a data center, industrial plant, or remote location, understanding its specifications enables optimized integration and performance. In Summary: - The Sagemcom CS 50001 offers high-speed wired and wireless connectivity. - Rugged hardware design ensures durability in harsh environments. - Multiple interfaces support diverse peripherals and protocols. - Advanced security features protect data integrity and privacy. - Flexible management tools facilitate seamless deployment and maintenance. - Its certifications and standards compliance guarantee broad compatibility. By thoroughly understanding these specifications, network engineers and decision-makers can confidently implement the Sagemcom CS 50001 as a core component of their infrastructure, ensuring reliable, secure, and scalable communication solutions.

Questions & Answers About sagemcom cs 50001 specs

No	Question	Answer
1	What are the key specifications of the Sagemcom CS 50001 router?	The Sagemcom CS 50001 features dual-band Wi-Fi, multiple Ethernet ports, advanced security protocols, and supports high-speed internet connections, making it suitable for both residential and small business use.
2	Does the Sagemcom CS 50001 support gigabit Ethernet connections?	Yes, the Sagemcom CS 50001 includes gigabit Ethernet ports to ensure fast and reliable wired internet connections.
3	What Wi-Fi standards does the Sagemcom CS 50001 support?	The device supports Wi-Fi 5 (802.11ac) and Wi-Fi 4 (802.11n) standards, providing robust wireless connectivity for multiple devices.
4	What are the security features available on the Sagemcom CS 50001?	The router offers WPA3 encryption, built-in firewall, and guest network options to enhance security and protect your network from unauthorized access.
5	What is the maximum speed supported by the Sagemcom CS 50001?	The Sagemcom CS 50001 supports internet speeds up to 1 Gbps, depending on your ISP plan and network setup.
6	Does the Sagemcom CS 50001 have any parental controls or device management features?	Yes, it includes parental controls, device prioritization, and network management tools to help you monitor and control connected devices.
7	Is the Sagemcom CS 50001 compatible with major internet service providers?	The device is compatible with many major ISPs; however, it's recommended to check with your provider to ensure compatibility before installation.

Sagemcom CS 50001, specifications, features, technical details, user manual, connectivity, performance, configuration, troubleshooting, device overview