



MyPower S3120-B iSecure Surveillance Switch Datasheet

Maipu Communication Technology Co., Ltd
No. 16, Jiuxing Avenue
Hi-Tech Park
Chengdu, Sichuan Province
P. R. China
610041
Tel: (86) 28-85148850, 85148041
Fax: (86) 28-85146848, 85148139
URL: [http:// www.maipu.com](http://www.maipu.com)
Mail: overseas@maipu.com

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Overview

With more than ten years of software technology, Maipu develops MyPower S3120-B series 100M iSecure Surveillance switch for 100M surveillance access scenario. MyPower S3120-B adopts the private hardware design. It is the L2 100M Ethernet switch product with the large-capacity 720P/1080P HD video stream access

SM3120-28TC-B-AC provides 24 100M electrical interfaces, two 1000M SFP optical interfaces, and two 1000M Combo ports. It supports the one-key switching function of the surveillance mode and AC power supply.

SM3120-28TP-B-AC provides 24 100M electrical interfaces, two 1000M SFP optical interfaces, and two 1000M Combo ports. It supports POE, the one-key switching function of the surveillance mode, and AC power supply.



MyPower S3120-B iSecure Surveillance Switch

Product Features

- **Innovative one-key surveillance mode, meeting the large-capacity 720P/1080P video access demand**

When deploying the private switch of the traditional video, the professional technical staff needs to go to the spot and the labor cost is high. It needs to configure lots of commands, causing large work load and delaying the deployment time. It is easy to miss the configuration commands, causing the hidden faults. Maipu develops MyPower S3120-B series switch with the one-key switching function of the hardware. Press the button for 5s and you can enter the surveillance mode to activate the common functions of the video access switch, simplifying the configuration work load of the device and improving the stable access quantity of the video terminals.

- **Long transmission distance, improving the access capability of the video terminal greatly**

MyPower S3120-B series switch adopts the full suite of chip solutions of the world's largest network chip company, Broadcom. The signal receiving sensitivity of the Ethernet interface is 1-2 times higher than the same type of switches adopting Taiwan low-end chip. When the other switches cannot detect the data signal correctly, MyPower S3120-B series switch also can receive the data signal normally, realizing the long transmission and access distance. When working in the 100M rate mode, it can realize the stable access of the video terminal in the 170m distance.

- **Leading hardware design, meeting the harsh environment requirement of the surveillance**

The hardware design of MyPower S3120-B series switch is from Maipu products applied to the carrier and finance customers. It can meet the 7*24-hour stable running requirement of this kind of users and reaches the hardware requirement of the industry switch on the hardware design index. The lightning protection level of the port can reach 7Kv air

discharge at most. It can work in -20~60°C environment stably. With the full-metal 1.5mm shell, it will not be damaged even dropping from 1m height.

- **Support the intelligent access detection of the video terminal, preventing the access of the unauthenticated user**

In the public areas with lots of cameras deployed, the unauthenticated users are easy to access. MyPowerS3120-B series switch provides the intelligent blocking function of the unauthenticated terminals, automatically identifying the non-video terminals, such as laptop and wireless router, and blocking the illegal access data, so as to prevent the unauthenticated access. Meanwhile, MyPower S3120-B has the identifying function for the video terminal of the specified brand, and the video terminals of other brands cannot be connected.

- **Support large cache and 12K Jumbo frame, meeting the transmission requirement of the 1080P HD video**

MyPower S3120-B series switch adopts the high-end network chip for 1080P HD video flow and provides up to 12K Jumbo frame, six times of the performance of the traditional switch 2K Jumbo frame, meeting the 1080P HD video flow. Meanwhile, it supports up to 16M large-capacity cache, 4-6 times of the performance of the traditional switch, meeting the concurrent transmission demand of the 1080 HD video flow.

- **Support the PDI detection function, performing the intelligent detection recovery for the abnormal work status of the video terminal**

For the POE video camera, MyPower S3120-B series switch provides the auto detection function for the work status of the camera. Once detecting the abnormal work status of the POE camera, restart the terminal automatically via the PoE power-off mode and send the system log alarms, removing the camera software fault automatically, reducing the impact on the monitoring service to a minimum, and greatly reducing the workload of the routine maintenance technician.

Product Specification

Hardware specifications		
Frame model	SM3120-28TC-B-AC	SM3120-28TP-B-AC
Port shape	24 10/100/1000M electrical ports Two 100/1000M SFP optical interfaces Two 1000M Combo interfaces	
Management interface	One RJ45 configuration interface	
Switching capacity	12.8Gbps	
Throughput	9.6Mpps	
Port cache	16Mbit	
MAC	32K	
VLAN	4k	
Jumbo frame	12K	
MTBF	>80,000 hours	
Dimension (W×D×H) (mm)	440x220x 44	440x320x 44
Input voltage (AC)	100-260V, 50/60Hz	
Power interface	Front	Front
Lightning protection level	Non-POE 7Kv air discharge (POE 3kv air discharge)	
POE function	NA	Each port supports 15.4W, 30W output, maximum 15.4w*24
Power consumption (MAX)	25W	380W
Fan	Intelligent speed-adjust silent fan	
Access distance	Long access distance, 100M can reach 170m	
Work temperature	-20~60℃ (POE model -20~55℃)	
Work humidity	5~90% non-condensing	
Software features		
Surveillance functions	One-key switching	Support switching the video mode by the hardware and software mode
	Video mode	Auto aggregation of the uplink port, the video packet is prior, long-frame transmission mode, port auto isolation, broadcast storm auto suppression
	Cache dynamic adjusting	Support the dynamic adjusting mechanism of the video interface cache
	Port auto-isolation function	In the video mode, support the port auto isolation function, invalid packet suppression
	The detection function of the video terminal	Detect type for the access terminal and automatically block the access of the non-video camera terminal

	The detection function of the specified terminal	Detect the video terminal of the specified brand and automatically block the access of the unauthenticated terminal
Link-layer protocol and technology	LAN	Support limiting the number of the learned MAC addresses; static MAC configuration, black-hole MAC
		Dynamic and static ARP, proxy ARP, free ARP
		Ethernet, Ethernet II, VLAN, 802.3x, 802.1p, 802.1Q, 802.3ad
		Support QinQ and selective QinQ, vlan mapping
		STP/RSTP/MSTP, GVRP, Super Vlan, Pvlan, Voice VLAN, Ulpp, Monitor link; support BPDU TUNNEL, PPPOE+, EIPS
	Multiple-to-one, multiple-to-multiple port mirroring, remote port mirroring, flow mirroring	
POE	POE function	802.3af, 802.3at, support priority, preemption function, fault auto monitoring
	PDI detection	Detect the work status of the POE terminal, and restart the abnormal terminal automatically
Security function	Security function	AAA, PORTAL, 802.1X, RADIUS, TACACS+, SSH, port security, user classification, port isolation, DHCP snooping, DAI, ARP check, ip source guard
	Attack defending	URPF, LAND attack, SYN Flood attack, Smurf attack, Ping Flood attack, TearDrop attack, Ping of Death attack, TCP packet attack, ICMP packet attack, the attack from the TCP/UDP packet with the destination port equal to source port
Network protocol	Router protocol	Default route, static route
	Ring protocol	Support the EIPS Ethernet ring protocol
	Multicast protocol	IGMP PROXY, IGMP filter, MVR
		IGMP Snooping, MLD v1/v2 Snooping
	IP application	DHCP Server, DHCP Client, DHCP Relay, DHCP Snooping, Option 43, 60, 82
		DHCPv6 Server, DHCPv6 Client, DHCPv6 Relay, DHCPv6 Option 6/16/18/37/60/82
		DNS, PING
		FTP Server, FTP Client
IPv6	IP Accounting, UDP Helper, NTP	
	IPv6 basic functions: IPv6 ND, IPv6 PMTU, IPv6 ACL	
	DS-Lite, IPv4/v6 Dual Stack	
QoS	Flow classification	Based on port, MAC address, IP address, IP priority, DSCP priority, TCP/UDP port number, protocol type, and so on
	Traffic monitoring	CAR
	Congestion management	SP, WRR, SP+WRR
	Congestion avoidance	RED, WRED
Virtualization	H-VST	Support VST (Virtual Switching Technology), maximum 8 device in one stacking group via Gigabit ports
	C-VST	Support vertical management virtualization, with the coordination of core switch, maximum 128 device can be virtualized into one logical switch for unified management
Management	Network management	Console port login management, HTTP, Telnet (VTY) remote management, WEB management, SSH management, SNMP V1/V2/V3, RMON 1/2/3/9, SYSLOG, DDMI, broadcast storm display

	Line management	Port line detection (VCT), UDLD
	Traffic analysis	Sflow traffic analysis
OAM	Network quality guarantee (SLA)	Support the network delay, jitter, packet loss rate and other test

Order Information

Product model	Description
MyPower S3120-B series host	
SM3120-28TC-B-AC	24 10/100M electrical ports, two 100/1000M SFP optical ports, two 1000M Combo ports, AC power, support one-key switching function of the surveillance mode
SM3120-28TP-B-AC	24 10/100M electrical ports, two 100/1000M SFP optical ports, two 1000M Combo ports, support the POE function, AC power, support one-key switching function of the surveillance mode