



SUNDRAY Turbo Fusion

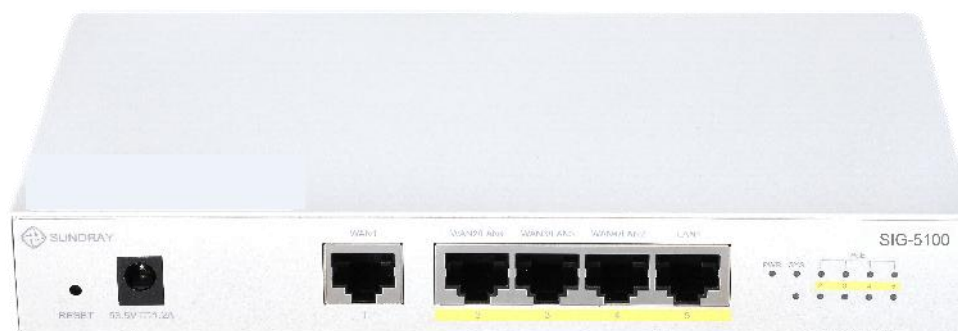
Safe Intelligence Gateway

SIG-5100

Product Overview

Turbo Fusion Safe Intelligence Gateway is a next-generation intelligent network gateway product launched by Sundray. The product can be flexibly deployed in gateway or bypass mode, integrating multiple functions including integrated wired and wireless management, multi-layered security protection, user authentication, user behavior management, VPN interconnection, and WAN quality awareness. By connecting to the SASE platform, it enables on-demand subscription of security services and works in conjunction with Sangfor NGAF/Cyber Commander to build a multi-layered security protection architecture. It can independently meet the integrated networking needs of small and medium-sized office scenarios, or be centrally managed by the iBrain Intelligent Network Management Center to implement an SD-Branch networking architecture, delivering a secure and intelligent ultimate networking experience for users!

Product phone



SIG-5100

Product Features

WeChat Mini Program for Zero-Touch Deployment

The SIG-5100 supports deployment initiation via WeChat Mini Program. Edit and share configurations via the Mini Program to on-site personnel, enabling convenient remote deployment and significantly improving multi-branch project delivery efficiency.

Turbo Fusion: Reduce Costs and Increase Efficiency in IT Construction

The SIG-5100 is not only a high-performance gateway but also integrates capabilities such as unified wired and wireless management, multi-layered security protection, user authentication, user behavior management, and VPN interconnection. It effectively meets the unified demands for enterprise gateways, network management, and security protection, reducing hardware investment quantity and cost, and achieving integrated IT delivery. Combined with link load balancing, it enables rational utilization of multiple lines. Leveraging VPN and routing technologies, it transforms investment from dedicated lines + routers to integrated gateway delivery.

Multi-layered Security Protection Architecture

The SIG-5100 can connect to Sangfor SASE-SWG subscription services to implement IPS, Anti-Virus, SSL Content Inspection, Malicious URL Filtering, Malicious IP Filtering, Malicious Domain Detection, and Threat Intelligence Cloud Lookup. It supports integration with Sangfor AF and SIP platforms to synchronize endpoint blacklists in real-time and jointly block abnormal access behaviors from risky terminals. It also supports local port protection, DoS defense, and a series of security protection capabilities against spoofing/scanning/flooding/ARP scanning/IP scanning/port scanning, forming a multi-layered security protection architecture.

Integrated Wired and Wireless Management

The SIG-5100 features integrated management capabilities for switches and APs, supporting zero-touch provisioning for devices. It allows intuitive viewing of AP online status, convenient configuration of wireless network SSIDs, and on-demand configuration of common radio parameters for APs. It also provides intuitive viewing of switch online status and includes common functions such as VLAN management, port ACL configuration, traffic mirroring, Layer 2/3 port configuration, link aggregation, and loop detection. Beneficial for small-scale networking scenarios, it not only saves the cost of wireless controllers but also eliminates the need for command-line configuration of each switch individually.

User Access Authentication Service



The SIG-5100 has a built-in Portal service module, providing authentication services for self-built networks. It easily enables various authentication methods, including Portal and IP address authentication.

Internet Access Management Service

The SIG-5100 has a built-in application identification library and a massive URL database with millions of entries. It can accurately identify multiple mainstream applications and implement different internet access permission policies based on factors such as user, access location, and time period.

Simplified WebGUI Visual Management

The SIG-5100 provides a user-friendly WebGUI management interface, improving management and operation efficiency while reducing difficulty. It allows flexible configuration changes and operations, providing convenience for users during management and maintenance.

WAN Sense Capabilities

Through WAN awareness capabilities, it helps users fully understand bandwidth availability, bandwidth utilization, gateway online status, DNS status, and DNS server latency. It recommends DNS servers with the best quality, presents VPN availability, and ranks VPN status and gateway VPN traffic, facilitating O&M management and resource adjustments like bandwidth.

Products Specifications

Hardware Specifications

Turbo Fusion Safe Intelligence Gateway	
Item	SIG-5100
Port number	1 Fixed Gigabit WAN Port 1*SFP 4 Gigabit Ports (3 of which support WAN/LAN switching), all 4 ports support PoE/PoE+ output
Dimensions (L*W*H) mm	190*100*28
Weight	0.462kg
Power consumption	<65W
PoE Output Power	54W

PoE Standard	IEEE 802.3af/at
Power Input	DC 53.5V/1.2A
Operating/storage temperature	0°C ~ 45°C/-40°C ~ 70°C
Operating/storage humidity	10% ~ 90% (non-condensation)/5% ~ 90% (non-condensation)

Software Specs

The software specification of Turbo Fusion Safe Intelligence Gateway		
SIG-5100		
Basic capability	Max Concurrent terminal	300
	Max Account Quantity	300
	NAT Performance	500M
	VPN Throughput	59M
	Max Managed APs	8
	Max Managed Switches	4
	Forwarding Throughput (PPPoE)	490M
	Forwarding Throughput (Static IP)	512M
	Online user checking	Yes
	Non-traffic user aging	Yes
	Routing	Yes
Gateway setting	DHCP, Static IP, PPPoE	Yes
	PPPoE Status and detail display	Yes
	MTU setting	Yes
	Default VLAN	Yes
	Subnet adding and delete	Yes
	Default VLAN1 can't be delated	Yes
	Up to 8 local subnets	Yes
	DHCP service for local subnet	Yes
	Dual WAN	Yes
	Port with VLAN mode	Yes
	Gateway deployment	Yes
	Bypass deployment	Yes
	Link aggregation/link detection/ ARP agent	Yes
	DHCP/ NAT/ IPv6	Yes
	Routing	Support static routing, policy-based routing, and DNS agent
	Layer3 interface physical detection	Yes
	VLAN id assignment on port	Yes

	Portal Service	Supports intelligent identification of terminal types, pushes appropriate terminal size pages for different terminals, supports custom page logos, display information, etc., and avoids repeated authentication within 2 hours.
	Reboot	Manual reboot
Wireless AP Management	802.11 Protocol Suite	Supports 802.11a/b/g/n/ac/Wave2/ax/e/i/h, etc.
	AP Zero-Touch Deployment	Yes
	User aging upon no traffic	Yes
	80MHz, 160MHz Channel Bonding	Yes
	Channel & Power Auto/Manual Adjustment	Yes
	Scheduled Radio Enable/Disable	Yes
	AP Load Balancing & 5G Priority	Yes
	Intra-Gateway Authentication Roaming	Yes
	Discovery Methods	Layer 2/3 Discovery, DHCP option 43, Domain Name, Cloud Discovery, SDP Technology
	Manage all NAP Model Wireless APs	Support
Switch Management	Static Routing	Yes
	Link Aggregation	Yes
	Layer 2/Layer 3 Port Configuration	Yes
	VLAN Management	Yes
	Port ACL	Yes
	Loop Detection	Yes
	Packet Mirroring	Yes
	Discovery Methods	Layer 2/3 Discovery, DHCP option 43, Domain Name, Cloud Discovery, SDP Technology
	Unified Management of RS/NS/HS Series Switches	Yes
Authentication	Static black/white list and dynamic blacklist	Yes
	Local Account Authentication	Yes
	Portal account	Yes
	Web authentication page customization/built-in authentication page template	Yes

	Terminal adaptation (size/language)	Yes
	Support editing page text	Yes
	Support editing term of use	Yes
	Redirection after authentication	Yes
Access control policies	Application/URL recognition and control	Support 300+ application, and ten-million level URL
	User authorization/role assignment/access control	Support account/ location/time...
	Automatic VLAN grouping based on attributes	Yes
	ACL	Yes
	Unified wired and wireless management	Yes
	Internet and intranet bandwidth management	Yes
	Allocate bandwidth based on different factors	Yes
	QOS	Yes
	Intranet wireless air interface	Yes
	802.11e/WMM	Yes
	End to end QoS service	Yes
	IPSec VPN	Yes
Security	Spoofing/scanning/flooding attack defense, smart port security	Yes
	Support adding trusted DHCP server	Yes
	Support wired and wireless ARP defense	Yes
	Support for adding trusted gateways	Yes
Security	User isolation supports MAC whitelist	Yes
	Support user's communication within specific VLAN	Yes
	Support setting the blacklist time	Yes
	Support ARP scanning defense	Yes
	Support IP scanning defense	Yes
	Support port scanning defense	Yes
	Support wireless DoS defense	Yes

	Support wireless flooding attack detection	Yes
	EAP type	Support EAP-PEA, EAP-MD5, EAP-MSCHAPv2
	Data encryption	Support
WAN Quality Sense	Gateway Availability Display	Branch online status, Branch VPN tunnel availability, DNS latency, DNS success rate. Supports viewing status for last 5 min, 1h, 1d, 7d.
	Gateway Bandwidth Availability Display	Supports viewing WAN port bandwidth status for last 5 min, 1h, 1d, 7d.
	Gateway Bandwidth Utilization Display	Supports quick view of WAN availability/utilization bar chart. Utilization for last 5 min, 1h, 1d, 7d.
	Gateway DNS Status Display	Shows success rate & latency per DNS server. DNS status for last 5 min, 1h, 1d, 7d. Recommends best quality DNS server
	VPN Status & Availability Display	Ranks VPN status & traffic. Shows VPN availability for last 5 min, 1h, 1d, 7d. Facilitates O&M management.
Cluster	Gateway cluster management	Yes (Access iBrain NMC Management Center)
	Support Backup Gateway Configuration File	Yes
NMS & Configuration	Multilingual management and management methods	Support WEB, CLI, Telnet, SSH. Etc.
	Status display/alarm	Yes
	Firmware upgrade/backup configuration and backup recovery	Yes
	DDNS dynamic domain name	Support PubYun

Ordering Information

Model	Specifications	Remarks
SIG-5100	Turbo Fusion Safe Intelligence Gateway, 5 Gigabit ports (supports up to 4 WAN ports, with 4 ports supporting PoE/PoE+ output). NAT performance is 500Mbps, supporting a maximum of 300 concurrent authenticated terminals, support to manage 8 AP and 4 Switches, can be managed NMC.	Essential



SANGFOR



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