



UC + Networking Convergence Solutions

GCC6020 - GCC6021

The GCC6020 Series provides an extraordinary all-in-one solution that redefines the communications experience by merging your unified communications and networking solutions into one platform. These state-of-the-art devices combine the functionality of 4 products to provide an all-in-one solution that includes a VPN router, next-generation firewall, IP PBX, and network switch. With the GCC Series, you can create and manage wired, wireless, and VPN networks, provide enterprise-grade network security, and utilize a market-leading communication and collaboration platform. These flexible devices provide unified management and centralized control of all Grandstream endpoint solutions, including Wi-Fi APs, network switches, IP Phones, and more. The GCC Series allows full UC, networking, and security solutions to be configured in minutes and managed through the cloud with the Grandstream Device Management System (GDMS), and can also be managed through our mobile app, local Web UI, CLI and SSH console management. Ideal for small and medium businesses, the GCC6020 Series provides an all-in-one platform that combines all business data, security, communication, and collaboration needs into one device – making it easier than ever to build state-of-the-art communication solutions.



Built-in IP PBX provides voice and video communications with advanced collaboration features



Built-in enterprise-grade firewall provides anti-virus, layer 3-7 IDS/IPS, DPI, SSL detection, and more



Built-in VPN router supports 6.5Gbps or 10Gbps to allow easy remote access to private networks



Gigabit

4 or 16 Gigabit ports provide a network switch; 5 or 24 PoE out ports; both have 2.5 Gigabit and 10 Gigabit SFP+ ports



Enhanced reliability with support for hot standby High-Availability



Easily configure, deploy, and manage all Grandstream endpoint solutions from one central location





Provides advanced security protection with encrypted traffic, secure boot, unique security certificates, and more



Managed through the cloud (GDMS), mobile app, local WEB UI, SSH, SNMP and CLI



Multiple WAN ports with load balancing and failover to maximize connection reliability

		
	GCC6020	GCC6021
Network Ports	1x 10 Gigabit SFP+ ports , 1x 2.5 Gigabit and 4x Gigabit Ethernet ports *All ports are WAN/LAN configurable, max 3xWAN	4x 10 Gigabit SFP+ ports , 8x 2.5 Gigabit and 16x Gigabit Ethernet ports *WAN/LAN is configurable, max 5xWAN
Auxiliary Ports	1xCONSOLE,1xUSB3.0	1xCONSOLE, 1xUSB3.0, 2xHA, 1xMGMT
Memory	4GB RAM, 32GB eMMC	4GB DDR4+256MB DDR3 RAM, 32GB eMMC, 128MB NAND
External Storage	M.2 SSD	
Router	6.5Gbps	10Gbps
IPsec VPN Throughput	1.3Gbps	
NAT Sessions	320K	
NGFW Throughput (DPI+IPS)	6Gbps	9Gbps
PBX	50 users and 16 concurrent calls by default Upgrades available for purchase See more for PBX capacity upgrade options	
Mounting	Desktop, Wall, and Rack-mountable	Desktop and Rack-mountable
Material	Metal	
LEDs	1x LED for SFP+, 5x LED(G) for Ethernet Ports , 5x LED(Y) for PoE Out, 1x LED(R/G/B) for device tracking and status indication, 1x LED for main power, 1x LED for Redundant Power System	24x LED(G/Y) for Ethernet Ports/PoE Out, 4x LED for SFP+, 2x LED for HA, 1x LED(R/G/B) for device tracking and status indication, 1x LED for main power, 1x LED for Redundant Power System
Connection Type	DHCP, Static IP, PPPoE	
Network Protocols	IPv4, IPv6, IEEE802.1q ,IEEE 802.1p, IEEE802.1x, IEEE802.3, IEEE 802.3u, IEEE 802.3x,IEEE802.3ab	
QoS	<ul style="list-style-type: none"> VLAN, TOS Support multiple traffic classes, filter by port, IP address, DSCP, and policing App QoS: Application/protocol monitoring and traffic statistics VoIP Prioritization 	
Firewall	<ul style="list-style-type: none"> DDNS, Port Forwarding, DMZ, UPnP, DoS & Spoofing defense, traffic rules, NAT DPI, Anti-Virus, IPS/IDS, SSL Proxy Content Control: DNS filtering, web url/class/key words filtering, application identification and control Email Security, Geo-IP filtering 	
VPN	<ul style="list-style-type: none"> IPsec VPN Client-to-Site / Site-to-Site IPSec Encryption: 3DES, AES IPSec Authentication: MD5, SHA-1, SHA2-256 IPSec Key Exchange: Main/Aggressive Mode, Pre-shared Key, DH Groups 1/2/5/14 IPSec Protocols: ESP IPSec NAT Traversal PPTP VPN Server / Client PPTP Encryption: MPPE 40-bit, 128-bit PPTP/L2TP Authentication: MS-CHAPv1/2 L2TP OpenVPN® Server / Client OpenVPN® Encryption: AES, DES OpenVPN® Authentication: MD5, SHA-1, SHA2-256, SHA2-384, SHA2-512 OpenVPN® Certificate: RSA WireGuard® 	
Network Management	Grandstream Device Management System (GDMS), GWN App, Local Web GUI, SSH, SNMP (v1/ v2c/v3) and CLI	
Max AP/Clients	Up to 300 GWN APs; Up to 500 Clients	Up to 300 GWN APs; Up to 1000 Clients
Power and Green Energy Efficiency	Universal power adaptor included: Input 100-240VAC 50-60Hz, Output: 54VDC 2.8A (150W); 5 x PoE out ports support IEEE802.3af/at, Maximum PoE Wattage: 120W RPS Input: 54VDC/2.8A	Universal power adaptor included: Input 100-240VAC 50-60Hz, Output: 54VDC 7.8A (420W); 8 x PoE out ports support IEEE 802.3 af/at/bt, 16 x PoE out ports support IEEE 802.3 af/at, Maximum PoE Wattage: 370W RPS Input: 54VDC/7.8A
Environmental	Operation: 0°C to 45°C Storage: -10°C to 60°C Humidity: 5% to 95% Non-condensing	
Physical	Unit Dimension: 280 x 185.5 x 44 mm Unit Weight: 1.5KG Entire Package Dimension: 384 x 209.5 x 60 mm Entire Package Weight: 2.1KG	Unit Dimension: 440 x 301.5 x 44mm Unit Weight: 4.2KG Entire Package Dimension: 557 x 413 x 138mm Entire Package Weight: 5.6KG
Package Content	GCC6020/GCC6021, Universal Power Supply, Rack mount kit, Quick Installation Guide	
Compliance	FCC, CE, RCM, IC	

Features & Benefits

VPN Router

Secure Multi-WAN and Networking

- Dynamic routing and Multi-WAN capabilities
- NAT, VLAN, performance-based WAN link selection and monitoring
- Load balancing, WAN link failover
- Hardware and firewall acceleration
- DHCP server, DNS server, IGMP proxy, TURN server
- IPv4/IPv6 support

High-speed Virtual Private Network

- WireGuard: secure remote access, site to site
- OpenVPN®: clients and servers
- PPTP: clients and servers
- L2TP
- IPSec: site-to-site, client-to-site
- Remote users management

Advanced QoS

- VLAN, ToS
- Multiple traffic classes, filter by port, IP address, DSCP, and policing
- App QoS
- VoIP Prioritization

Firewall

- Filter by source destination, protocol, and port
- Stateful packet inspection
- DoS attack protection (UDP/ICMP/SYN flood)
- Enhanced spoofing defense
- For subscription firewall plans, visit:
<https://cloud.grandstream.com/firewall/plans>

Intrusion Detection & Prevention

- Signature-based scanning
- Auto rule update using configurable cron
- Real-time SSL deep inspection
- SSL blacklist & whitelist

Advanced Threat Protection

- Instant identification and immediate response to the most sophisticated attacks.
- Supports application/ protocol monitoring and traffic statistics with Deep Packet Inspection (DPI).
- Geo-IP enforcement

Network Switch

- GCC6021: 4x 10 Gigabit SFP+ ports , 8x 2.5 Gigabit and 16x Gigabit Ethernet ports
- GCC6020: 1x 10 Gigabit SFP + port, 1x 2.5 Gigabit port and 4x Gigabit Ethernet ports
- Smart power control to support dynamic PoE/PoE+, PoE++ (only GCC6021) power allocation per PoE port
- Supports deployment in IPv6 and IPv4 networks
- Built-in QoS allows for prioritization of network traffic

IP PBX

- Supports 50 users and 16 concurrent calls by default
- Upgrades available for purchase - [See more for PBX capacity upgrade options](#)
- Rich PBX services, including Call Forwarding, Transfer, Parking, Intercom/Paging, IVR, Emergency Calls, etc
- Built-in audio and video conferencing platform, supports Wave Desktop/Web/Android/iOS
- Fast provisioning of Grandstream SIP endpoints
- Supports multiple audio and video encodings, such as Opus, G.711 A-law/U-law, G.722, G722.1 G722.1C, G.723.1 5.3K/6.3K, G.726-32, G.729A/B, iLBC, GSM; T.38 , H.264, H.263, H263+, VP8
- QoS : FEC/JPB/NetEQ/ToS/DSCP
- Protocols: SIP, TCP/UDP/IP, RTP/RTCP, ICMP, ARP, DNS, SFTP, SSH, HTTPS, RTSP, STUN, SRTP, TLS, LDAP
- Full API available for third-party platform and application integration
- Supports Property Management Systems (PMS), call centers, CRM integration, and more

Management

Centralized Management

- Intuitive user interface with device management center
- Grandstream wireless access point, switch and UC endpoints integration
- All nodes in the network can be displayed in a topology graph and controlled with a few clicks
- Quickly provision of thousands of devices

Easy Maintenance

- Management via Grandstream Device Management System (GDMS), Local Web GUI, SSH, & SNMP (v1/v2c/v3)
- CPU and memory usage monitoring
- Diagnostic methods through Ping, packet capture, external syslog, ARP table, link tracing table, interface, and more
- Cyber security protection annual update service

Dynamic Reporting & Monitoring

- Multiple types of visual charts and graphics for dynamic reporting and monitoring