UC + Networking Convergence Solutions
GCC6010 - GCC6010W - GCC6011

The GCC6010 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 or Wi-Fi access point. 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, and CLI console management. Ideal for small-to-medium sized businesses, the GCC6010 Series provides an all-in-one platform that combines all business data, security, communication, and collaboration needs into one device – making it easier and more affordable 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 2.5Gbps or 3Gbps to allow easy remote access to private networks
5 or 10 Gigabit ports provide a network switch; GCC6010/6011: 4x PoE out ports, 2x 2.5 Gig SFP ports	GCC6010W includes a built-in dual-band Wi-Fi 6 AP with 2x2 MIMO technology	Easily configure, deploy, and manage all Grandstream endpoint solutions from one central location
Provides advanced security protection with encrypted traffic, secure booth, unique security certificates, and more	Managed through the cloud (GDMS), mobile app, local WEB UI, SSH, and SNMP	Multiple WAN ports with load-balancing and failover to maximize connection reliability

GCC6010 and GCC6011

	GCC6010	GCC6011
Network Ports	2 x 2.5 Gigabit SFP ports and 5 x Gigabit Ethernet ports *All ports are WAN/LAN configurable, max 3x WAN	2 x 2.5 Gigabit SFP port and 10 x Gigabit Ethernet ports *3x Fixed WAN
Auxiliary Ports	1xMicro-SD, 1xUSB 3.0, 1xReset	
Memory	2GB RAM, 32GB eMMC Flash	
External Storage	N/A	Optional, up to 1T M.2 SSD
Router	2.5Gbps	
IPsec VPN Throughput	1Gbps	
NAT Sessions	160K	
IDS/IPS	900Mbps	
PBX	12 users and 4 concurrent calls by default - upgrades available for purchase that provide expansion	
PoE Output	4 x PoE out ports, IEEE802.3af/at, Maximum PoE Wattage: 36W	
Mounting	Desktop and Wall-mountable	Desktop, Wall, and Rack-mountable
Material	Metal	
LEDs	7x single LEDs , 4x PoE LEDs, and 1x RGB LED for device tracking and status indication	12x single LEDs, 4x PoE LEDs, and 1x RGB LED for device tracking and status indication
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	• 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	• 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	
VPN	• 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 Encrpytion: MPPE 40-bit, 128-bit • PPTP/L2TP Authentication: MS-CHAPv1/2 • L2TP Client-to-Site • 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), Local Web GUI, SSH, and SNMP (v1/ v2c/v3))	
Max AP/Clients	Up to 150 GWN APs; Up to 500 Clients	
Power and Green Energy Efficiency	Universal power adaptor included: Input 100-240VAC 50-60Hz Output: 48VDC 1A (48W); 4 x PoE out ports, IEEE802.3af/at Maximum PoE Wattage: 36W	
Environmental	Operation: 0°C to 45°C Storage: -30°C to 60°C Humidity: 5% to 95% Non-condensing	
Physical	Unit Dimension: 191x 101 x 29mm Unit Weight: 520g Entire Package Dimension: 300 x 130 x 53 mm Entire Package Weight: 835g	Unit Dimension: 280 x 180 x 44 mm Unit Weight: 1200g Entire Package Dimension: 366 x 211 x 53 mm Entire Package Weight: 1600g
Package Content	GCC6010/GCC6011, Universal Power Supply, Rack mount kit (GCC6011 only), Quick Installation Guide	
Compliance	FCC, CE, RCM, IC	

GCC6010W

	GCC6010W
Wi-Fi Standards	IEEE 802.11 a/b/g/n/ac/ax
Antennas	3 individual internal antennas (2 x dual band + 1 x single band 5G) 2.4GHz: maximum gain 4dBi 5 GHz: maximum gain 6dBi
Wi-Fi Data Rates	**2.4G:** IEEE 802.11ax: 7.3 Mbps to 573.5 Mbps IEEE 802.11n: 6.5 Mbps to 300 Mbps IEEE 802.11b: 1, 2, 5.5, 11 Mbps IEEE 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps **5G:** IEEE 802.11ax: 7.3 Mbps to 3603 Mbps IEEE 802.11ac: 6.5 Mbps to 2600 Mbps IEEE 802.11n: 6.5 Mbps to 450 Mbps IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps *Actual throughput may vary depending on many factors including environmental conditions, distance between devices, radio interference in the operating environment and mix of devices in the network
Frequency Bands	2.4GHz radio: 2400 – 2483.5 MHz (2412-2472MHz is channel central frequency range; 2400-2483.5MHz is Frequency band) 5GHz radio: 5150 - 5895 MHz *Not all frequency bands can be used in all regions
Channel Bandwidth	2.4G: 20 and 40 MHz 5G: 20, 40, 80, 160 MHz
Wi-Fi and System Security	WPA/WPA2-PSK, WPA/WPA2 Enterprise (TKIP/AES); WPA3, anti-hacking secure boot and critical data/control lockdown via digital signatures, unique security certificate and random default password per device
MU-MIMO	2x2:2 2.4GHz 3x3:3 5GHz
Maximum TX Power	5G: 25.5dBm 2.4G: 28.5dBm *Maximum power varies by country, frequency band and MCS rate
Receiver Senstivity	**2.4G** 802.11b: -97dBm@1Mbps, -89dBm@11Mbps; 802.11g: -93dBm @6Mbps, -75dBm@54Mbps; 802.11n 20MHz: -73dBm @MCS7; 802.11n 40MHz: -70dBm @MCS7; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -63dBm @MCS11 **5G** 802.11a: -93dBm @6Mbps, -75dBm @54Mbps; 802.11n: 20MHz: -73dBm @MCS7; 802.11n 40MHz: -70dBm @MCS7 802.11ac 20MHz: -70dBm@MCS8; 802.11ac: HT40:- 66dBm @MCS9; 802.11ac 80MHz: -62dBm @MCS9; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -61dBm @MCS11;802.11ax 80MHz: -58dBm @MCS11 802.11ax 160MHz: -54dBm@MCS11
Network Ports	5x Gigabit Ethernet ports *All ports are WAN/LAN configurable, max 3x WAN
Auxiliary Ports	1xMicro-SD, 1xUSB 3.0, 1xReset
Memory	2GB RAM, 32GB eMMC Flash
External Storage	N/A
Router	3Gbps
IPsec VPN Throughput	1Gbps
NAT Sessions	160K
IDS/IPS	900Mbps
PBX	12 users and 4 concurrent calls by default - upgrades available for purchase that provide expansion
Mounting	Desktop
Material	Plastic Mini-Tower
LEDs	8 x LEDs for device tracking and status indication
Connection Type	DHCP, Static IP, PPPoE

GCC6010W

Network Protocols	IPv4, IPv6, IEEE802.1q, IEEE 802.1p, IEEE802.1x, IEEE802.3, IEEE 802.3u, IEEE 802.3x,IEEE802.3ab
QoS	• 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	• DDNS, Port Forwarding, DMZ, UPnP, DoS & Spoofing defense, traffic rules, NAT, ALG • DPI, Anti-Virus, IPS/IDS, SSL proxy • Content Control: DNS filtering, web url/class/key words filtering, application identification and control
VPN	• 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 Encrpytion: MPPE 40-bit, 128-bit • PPTP/L2TP Authentication: MS-CHAPv1/2 • L2TP Client-to-Site • 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), Local Web GUI, SSH, and SNMP (v1/ v2c/v3)
Max AP/Clients	Up to 150 GWN APs; Up to 500 Clients
Power and Green Energy Efficiency	Universal power adaptor included: Input 100-240VAC 50-60Hz Output: 12VDC 1.5A (18W);
Environmental	Operation: 0°C to 45°C Storage: -30°C to 60°C Humidity: 5% to 95% Non-condensing
Physical	Unit Dimension: 95 x 95 x 193 mm Unit Weight: 565g Entire Package Dimension: 186 x 127 x 105 mm Entire Package Weight: 920g
Package Content	GCC6010W, Universal Power Supply, Network Cable, 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

Intrusion Detection & Prevention
- Signature-based scanning
- Auto rule update using configurable cron
- Real-time SSL deep inspection
- SSL blacklist & whitelist
- GeoIP enforcement (FP2)

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).

Wi-Fi Access Point (GCC6010W only)
- Up to 500+ concurrent Wi-Fi client devices
- Dual-band (2.4 GHz and 5 GHz)
- 802.11 a/b/g/n/ac/ax wireless standards
- Wireless intrusion detection and prevention
- Virtual access point
- Captive portals

IP PBX
- Supports 12 users and 4 concurrent calls by default, upgrades available for purchase that provide expansion
- 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/JB/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