



# 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 SSH 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



### Gigabit

5 or 10 Gigabit ports provide a network switch; GCC6010/6011: 4x PoE out ports, 2x 2.5 Gigabit 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

	 <b>GCC6010</b>	 <b>GCC6011</b>
<b>Network Ports</b>	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
<b>Auxiliary Ports</b>	1xMicro-SD, 1xUSB 3.0, 1xReset	
<b>Memory</b>	2GB RAM, 32GB eMMC Flash	
<b>External Storage</b>	N/A	Optional, M.2 SSD
<b>Router</b>	2.5Gbps	
<b>IPsec VPN Throughput</b>	1Gbps	
<b>NAT Sessions</b>	160K	
<b>IDS/IPS</b>	900Mbps	
<b>PBX</b>	12 users and 4 concurrent calls by default Upgrades available for purchase ( <a href="#">See more for PBX capacity upgrade options</a> )	
<b>PoE Output</b>	4 x PoE out ports, IEEE802.3af/at, Maximum PoE Wattage: 36W	
<b>Mounting</b>	Desktop and Wall-mountable	Desktop, Wall, and Rack-mountable
<b>Material</b>	Metal	
<b>LEDs</b>	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
<b>Connection Type</b>	DHCP, Static IP, PPPoE	
<b>Network Protocols</b>	IPv4, IPv6, IEEE802.1q ,IEEE 802.1p, IEEE802.1x, IEEE802.3, IEEE 802.3u, IEEE 802.3x,IEEE802.3ab	
<b>QoS</b>	<ul style="list-style-type: none"> <li>• VLAN, TOS</li> <li>• Support multiple traffic classes, filter by port, IP address, DSCP, and policing</li> <li>• App QoS: Application/protocol monitoring and traffic statistics</li> <li>• VoIP Prioritization</li> </ul>	
<b>Firewall</b>	<ul style="list-style-type: none"> <li>• DDNS, Port Forwarding, DMZ, UPnP, DoS &amp; Spoofing defense, traffic rules, NAT</li> <li>• DPI, Anti-Virus, IPS/IDS, SSL Proxy</li> <li>• Content Control: DNS filtering, web url/class/key words filtering, application identification and control</li> </ul>	
<b>VPN</b>	<ul style="list-style-type: none"> <li>• IPsec VPN Client-to-Site / Site-to-Site</li> <li>• IPsec Encryption: 3DES, AES</li> <li>• IPsec Authentication: MD5, SHA-1, SHA2-256</li> <li>• IPsec Key Exchange: Main/Aggressive Mode, Pre-shared Key, DH Groups 1/2/5/14</li> <li>• IPsec Protocols: ESP</li> <li>• IPsec NAT Traversal</li> <li>• PPTP VPN Server / Client</li> <li>• PPTP Encrpytion: MPPE 40-bit, 128-bit</li> <li>• PPTP/L2TP Authentication: MS-CHAPv1/2</li> <li>• L2TP Client-to-Site</li> <li>• OpenVPN® Server / Client</li> <li>• OpenVPN® Encryption: AES, DES</li> <li>• OpenVPN® Authentication: MD5, SHA-1, SHA2-256, SHA2-384, SHA2-512</li> <li>• OpenVPN® Certificate: RSA</li> <li>• WireGuard®</li> </ul>	
<b>Network Management</b>	Grandstream Device Management System (GDMS), Local Web GUI, SSH, and SNMP (v1/ v2c/v3))	
<b>Max AP/Clients</b>	Up to 150 GWN APs; Up to 500 Clients	
<b>Power and Green Energy Efficiency</b>	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	
<b>Environmental</b>	Operation: 0°C to 45°C Storage: -30°C to 60°C Humidity: 5% to 95% Non-condensing	
<b>Physical</b>	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
<b>Package Content</b>	GCC6010/GCC6011, Universal Power Supply, Rack mount kit (GCC6011 only), Quick Installation Guide	
<b>Compliance</b>	FCC, CE, RCM, IC	

# GCC6010W



**GCC6010W**

<b>Wi-Fi Standards</b>	IEEE 802.11 a/b/g/n/ac/ax
<b>Antennas</b>	3 individual internal antennas ( 2 x dual band + 1 x single band 5G) 2.4GHz: maximum gain 4dBi 5 GHz: maximum gain 6dBi
<b>Wi-Fi Data Rates</b>	<b>2.4G:</b> 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 <b>5G:</b> 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
<b>Frequency Bands</b>	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
<b>Channel Bandwidth</b>	2.4G: 20 and 40 MHz 5G: 20, 40, 80, 160 MHz
<b>Wi-Fi and System Security</b>	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
<b>MU-MIMO</b>	2x2:2 2.4GHz 3x3:3 5GHz
<b>Maximum TX Power</b>	5G: 25.5dBm 2.4G: 28.5dBm *Maximum power varies by country, frequency band and MCS rate
<b>Receiver Sensitivity</b>	<b>2.4G</b> 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 <b>5G</b> 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
<b>Network Ports</b>	5x Gigabit Ethernet ports *All ports are WAN/LAN configurable, max 3x WAN
<b>Auxiliary Ports</b>	1xMicro-SD, 1xUSB 3.0, 1xReset
<b>Memory</b>	2GB RAM, 32GB eMMC Flash
<b>External Storage</b>	N/A
<b>Router</b>	3Gbps
<b>IPsec VPN Throughput</b>	1Gbps
<b>NAT Sessions</b>	160K
<b>IDS/IPS</b>	900Mbps
<b>PBX</b>	12 users and 4 concurrent calls by default Upgrades available for purchase ( <a href="#">See more for PBX capacity upgrade options</a> )
<b>Mounting</b>	Desktop
<b>Material</b>	Plastic Mini-Tower
<b>LEDs</b>	8 x LEDs for device tracking and status indication
<b>Connection Type</b>	DHCP, Static IP, PPPoE

# GCC6010W

<b>Network Protocols</b>	IPv4, IPv6, IEEE802.1q, IEEE 802.1p, IEEE802.1x, IEEE802.3, IEEE 802.3u, IEEE 802.3x, IEEE802.3ab
<b>QoS</b>	<ul style="list-style-type: none"> <li>• VLAN, TOS</li> <li>• Support multiple traffic classes, filter by port, IP address, DSCP and policing</li> <li>• App QoS: Application/protocol monitoring and traffic statistics</li> <li>• VoIP Prioritization</li> </ul>
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<b>Network Management</b>	Grandstream Device Management System (GDMS), Local Web GUI, SSH, and SNMP (v1/ v2c/v3)
<b>Max AP/Clients</b>	Up to 150 GWN APs; Up to 500 Clients
<b>Power and Green Energy Efficiency</b>	Universal power adaptor included: Input 100-240VAC 50-60Hz Output: 12VDC 1.5A (18W);
<b>Environmental</b>	Operation: 0°C to 45°C Storage: -30°C to 60°C Humidity: 5% to 95% Non-condensing
<b>Physical</b>	Unit Dimension: 95 x 95 x 193 mm Unit Weight: 565g Entire Package Dimension: 186 x 127 x 105 mm Entire Package Weight: 920g
<b>Package Content</b>	GCC6010W, Universal Power Supply, Network Cable, Quick Installation Guide
<b>Compliance</b>	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
- GeolP 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 ([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