

G-4000

SMB Public Access Controller

A universal solution for secure public Internet at small and medium Hotspots



The **G-4000 Public Access Controller** provides authentication, accounting and security mechanisms to enable user-friendly wired and wireless Internet services at venues like cafés, hotels, enterprises with up to 50 simultaneous users.

Public Access Control

The Gemtek Systems *G-4000* Public Access Controller is designed to provide carrier-grade AAA (Authentication, Authorization, Accounting), IP Routing, and VPN functionality for public Internet services. One *G-4000* can connect and serve up to 50 simultaneous subscribers using

Multiple Authentication Methods

The *G-4000* supports various secure authentication methods from standard web browser login, 802.1x/EAP, MAC authentication and RADIUS. When using the web login method all user names and passwords are secured over SSL. EAP can be used either directly over 802.1x or via RADIUS when the EAP authenticator resides within the Wireless LAN access point.

Accounting

For billing purposes accounting information such as online time and transfer volume, is collected by the *G-4000* in real time, and forwarded to the network operation center via RADIUS. A wide variety of billing plans from pre-paid time, pre-paid volume, post-paid subscriptions, pay-per-use and flat-rates are supported. For data security purposes accounting backups can be stored in internal flash memory or on external backup servers.

Backend Integration

The Gemtek Systems access controller is fully based on standard protocols and interfaces. It is compliant to the recommendations of the Wi-Fi Alliance 'Best Current Practices for Wireless Internet Service Provider Roaming' (WISPr)¹⁾. Interoperability with leading RADIUS and Web application servers (e.g. Funk, WiFicom, iPass) is continuously being tested. For security purposes all AAA and management traffic to the network operation center can be tunneled and encrypted by the internal VPN gateway.

Multiple WISP Roaming

Through its integrated roaming logic, a single *G-4000* access controller can serve subscribers from multiple service providers. Beyond RADIUS roaming the *G-4000* supports up to 8 VLANs which allow network operators to define dedicated AAA and IP policies per WISP/VLAN.

Customizable Welcome Pages

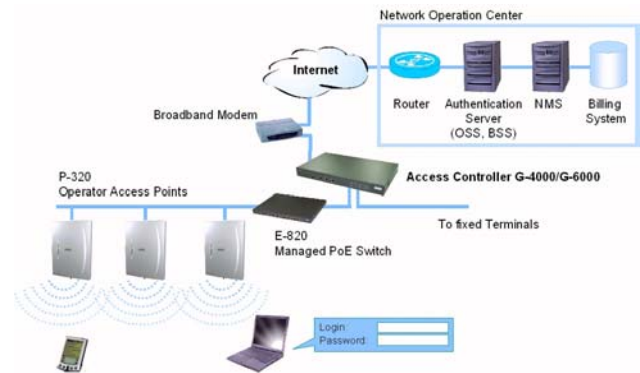
Service providers can benefit from the flexible web redirection service of the Gemtek Systems Access Controller. The *G-4000* provides a set of location, browser, and user-specific information to the backend system to enable value added personalized services by the WISP. Detailed session and location information is available via Https/XML interfaces. Web pages can be either stored locally on the *G-4000* or remotely on a web portal server.

Zero Configuration for Subscribers

The Gemtek Systems *G-4000* makes internet access very easy and user-friendly for the end-user. Subscribers will be redirected to the providers welcome page automatically regardless of their PC configuration. The UAT (Universal Address Translation) feature will accept and translate fixed company IP settings and web proxy configurations – so end-users do not have to reset their corporate IP or web settings. Equally, outgoing subscriber e-mails can be redirected to the operator's mail server in order to facilitate e-mail forwarding for foreign subscribers. The recipient sees the message as if it was sent from the user's home provider.

Remote Management

You can choose between a variety of different management interfaces to remotely configure, monitor, or update the *G-4000* and the access devices behind the controller. The *G-4000* can be managed via SNMP, https, SSH or telnet, or alternatively via the serial port.



¹⁾ WISPr see also www.wi-fi.org. Wi-Fi is a trademark of the Wi-Fi Alliance.

Gemtek Systems, a global Wi-Fi Public Access systems and solutions provider, is a subsidiary of Gemtek Technologies, the world's largest independent supplier of Wi-Fi products.

G-4000 Specifications

HIGHLIGHTS	
User authentication with UAM (Universal Access Method), 802.1x/EAPoLAN, MAC Address,	AAA Radius client and proxy server with EAP support
Up to 50 simultaneous users	Universal Address Translation (UAT), web proxy support
WISPr compatible log-on via web browser with SSL/TLS, iPass client support	Unlimited White List (walled garden area, free web sites)
Customizable welcome, log-on, and log-off pages, XML support (internal, external)	E-mail redirection
IP routing with IPsec and PPTP pass-through, NAT/NAPT, Port-forwarding	Per-user bandwidth management via RADIUS
WAN protocols: PPPoE, PPTP, DHCP client	DHCP server/relay/Client
VPN client: PPTP/MPPE, GRE	Management subnet for remote AP management
VLAN support (up to 8 VLANs)	Multiple IP pools per LAN/VLAN
Remote management via SNMP v1, 2c, 3, SNMP proxy, https, SSH, telnet, console	Up to 32 WISPs supported (32 RADIUS servers with backup server)
HARDWARE	
Ethernet interfaces	2xLAN, 1xWAN, 10/100 Base-Tx(RJ-45), auto-sensing
Throughput	Max. 10 Mbps IP throughput
Terminal	1 X DB-9 Male (RS 232)
Dimensions	19" rack mountable, 1 HU, metal housing, 436 X 260 X 44 mm (17.2 x 10.2 x 1.7in)
Weight	ca. 3.4 Kg
Operating Temperature	0 to 50° C, Storage: -10 to 65° C
Operating Humidity	5% to 95% non-condensing
Power Supply	Integrated power supply, auto sensing 100 - 240 VAC; 50/60 Hz, max. 3A
Power consumption	max. 100W
LEDs:	Power, Status, LAN-link, LAN-RX/TX, WAN-link, WAN-RX/TX, DMZ-link, DMZ-RX/TX
MANAGEMENT	
Configuration	SNMP v1,v2c, 3 (RFC 1157, 2011-2013, 2571-2576, 1213, 1215), MIB II, Gemtek Systems private MIB), HTTPs, Telnet, Terminal, SSH v2
Software Update	Remote firmware update via HTTPs, FTP, or console port
WARRANTY	
2 years	
PACKAGE CONTENTS	
G-4000 Public Access Controller	Rack mounting parts
Printed User's Manual	Console cable, Ethernet cables
CD-ROM with software and documentation	Power Cord (country specific)
RELATED PRODUCTS	
Access Controller:	G-6000/G-4100 Public Access Controller
Hotspot-in-a-Box:	P-560 54Mb High-Performance Hotspot-in-a-Box, P-360 11Mb Hotspot-in-a-Box
Access Points:	P-320 11Mb Operator AP, P-380 11Mb Outdoor Router

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