

# NONIUS.HSIA | WGS20K & WGS20KF



NONIUS.HSIA solution is a highly advanced solution for Hospitality Internet access management. Due to its efficient usage of the link(s) capacity, the high availability and high performance, makes the NONIUS.HSIA, an ideal solution for high density Wi-Fi hotspots (e.g. Hotels with large conference spaces).

The WGServer is a high availability and reliability appliance with all the necessary gateway and server functions to manage Internet access. It's main application is the management and control of Internet access hotspots.

It combines the functionalities of a hotspot gateway, the network services of a network server, and the integrated Internet access management and billing software, needed for small and medium scale ISP deployment.

## MAIN FEATURES

- Internet access management & billing
- Integrated billing front office software
- Hotspot gateway (captive portal, zero configuration)
- 3<sup>rd</sup> Party Integration (Hotel PMS systems, switching, hotspot gateways)
- High availability (failover, load balancing, QoS, caching)
- Comprehensive management interface
- Redundancy module

## MANAGEMENT

- 1 x Gigabit Ethernet 10/100/1000 Mbps
- LCD and bezel buttons for basic configuration and status
- SNMP

## SPECIFICATIONS

Mechanical/Environmental/Compliance	WGS20K	WGS20KF
Power supply	80 plus 250W full-range ATX	80 plus 250W full-range ATX
Physical dimensions	438(w)x292(d)x44(h)mm	438(w)x292(d)x44(h)mm
Rack mount	1U	1U
Network Interfaces	8 x Gbe Ports	6 x Gbe Ports + 2 x 10Gbe Ports
Operating Temperature	0 to 40°C (32 to 104°F)	0 to 40°C (32 to 104°F)
Humidity (non-condensing)	20% to 90%RH @ 55°C	20% to 90%RH @ 55°C
Compliance	CE/FCC/UL	CE/FCC/UL
Cache	1Gb	2Gb

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## TECHNICAL SPECIFICATIONS

### NETWORK SERVER SERVICES

- RADIUS server / Roaming
- WEB server (PHP, PERL, SSL, CGI)
- Email server (POP3, IMAP, SMTP)
- Mysql database
- Dynamic DNS
- Network Time Protocol
- Transparent HTTP Proxy
- DNS Server
- Web space services
- WebMail services

### MULTIPLE CONTROLLERS

- WAN link failover
- Multiple gateway load balancing
- Hotspot bandwidth Up/Dn limitation
- Bandwidth management per subscriber network
- QoS/Traffic shaping - 6 service levels
- Service availability
- Favourites preloading and caching

### SECURITY AND FIREWALL

- Statefull inspection firewall
- SIP, H.323 ALG
- FTP client passive/active ALG
- PPTP, IPSEC, Cisco VPN, pass-through
- DNAT, SNAT, Traversal NAT
- Port forwarding per user/MAC address
- MAC filter
- HTTP proxy redirection
- Web site access blacklist
- Free/Blocked IP adress management
- Implements european directive 2006-24-CE

### INTEGRATION/COMPATIBILITY

- 3<sup>rd</sup> Party hotspot gateway subscribers (Colubris, Cisco, ...)
- Hotel PMS/If (EasyLinqHotel, NewHotel, Fidelio, HBS, CMNET, Desbravador, Hotel Concepts, OCL, Protel, Brilliant, ...)
- Switching (3COM, HP, Cisco, ...)
- Ticket printers (Brother QL-550, Godex EZPlus)
- 3<sup>rd</sup> Party WISPr authentication radius server
- 3<sup>rd</sup> Party database connectors for user authentication
- Web services based API for hotspot management

### MANAGEMENT

- Intuitive web configuration
- No client software required
- Internet Explorer, Firefox compatible
- Serial console for recovery
- Automatic DB backups
- Events Email notification
- Local Logging
- Hotspot Devices Management
- Maintenance Client VPN (OpenVPN)
- Access control compliant with 2006-24-CE
- SNMP Agent

### INTERNET ACCESS BILLING

- AAA - Authentication, Authorization & Accounting
- Web page login with secure HTTPS authentication
- Hotspot with frame pointing to configurable web site
- Connection's time control web page pop-up
- Configurable automatic logoff (inactivity detection)
- Free/Blocked web sites management
- Online user registration system
- SMS user registration system
- PayPal / Credit card billing
- Pre-paid cards management / generation
- Users accounts management
- MAC address authentication
- Username/password authentication
- Flexible time-based billing (hour, min, ...)
- Flexible traffic-based billing (MB, GB)
- Flexible traffic-based / time usage / absolute time / bandwidth service limitations
- Usage statistics / users statistics records
- Users traffic logger
- Pre-paid statistics persistent records
- Sessions historic reports / ROI calculation
- Per VLAN login webpage
- Highly flexible, comprehensive and configurable billing profiles

### PLATFORM

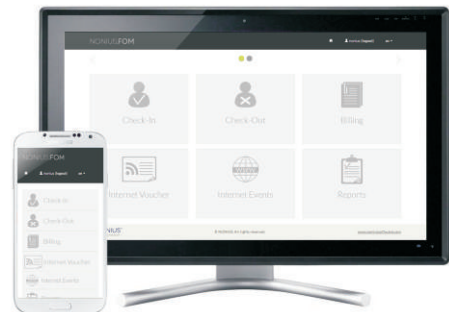
- Nonius customized embedded Linux
- Linux Kernel 2.6
- Java virtual machine for applications integration
- Apache web server
- Transparent proxy

### HOTSPOT GATEWAY SERVICES

- Captive portal (HTTP) - Layer2 / Layer3
- Radius WISPr extension compatible
- Zero configuration (any IP, any DNS, any Proxy)
- Universal Access Method (UAM)
- DHCP server / client
- DNS relay / client
- MAC filter
- SPI firewall, NAT, DNAT e SNAT

### NETWORK SERVICES

- TCP/IP Protocol Stack
- Routing / Forwarding Services
- 802.11Q TAG VLANS
- Intra VLAN traffic blocking
- Bridge, STP Protocol
- SSH, Ping, Telnet, SNMP



Model	WGS20K	WGS20KF
Max Simultaneous Users	7500	20 000
Max Aggregated Bandwidth	1.2GB/s	3.6GB/s
Max Connect. Tracking Sessions	5M	20M
Memory RAM	2GB	8GB
CPU	Dual Core 3.5 GHz	Quad Core 3.9 GHz