

**Reliable, Secure, Scalable Wireless Controller for Small and Mid-sized Businesses**

The NETGEAR ProSafe Smart Wireless Switch is a full-featured wireless controller that centrally manages 16 access points, delivering integrated wireless mobility, security and converged services for both wired and wireless users.

Supporting up to 256 users per ProSafe Smart Wireless Switch, the WFS709TP has built in PoE support on all eight 10/100 interfaces. With a Gigabit Ethernet port typically used to connect the Wireless Switch to the network backbone, WFS709TP supports advanced security features such as 802.1x, EAP-PEAP, EAP-TLS, EAP-TTLS, 802.11i, MAC address, SSID and location-based authentication.

With identity-based security features such as support for RADIUS, LDAP and AAA server support, NETGEAR ProSafe Smart Wireless Switch truly unifies wired and wireless access without compromising on security.

Deployment

Deployed as an overlay on the existing network infrastructure, WFS709TP centrally manages, deploys, monitors and controls your wireless infrastructure. Supporting multiple deployment architectures including standalone switch deployments to hierarchical setups in master/local configurations, the NETGEAR ProSafe Smart Wireless Switch can be configured in “master” mode where all the configuration and security parameters are managed for the entire wireless network. In addition, WFS709TP can be configured in “local” mode, acting as policy enforcement points for the “master” controller as part of a hierarchical setup.

The overall Smart Wireless Switch Solution supports up to 32 access points with the Smart Wireless Switches configured in redundant master/local mode and up to 48 access points with the Smart Wireless Switches configured in non-redundant master/local configuration. A standalone Smart Wireless Switch supports up to 16 access points.

IntelliFi RF Management

Targeted towards the growing business NETGEAR ProSafe Smart Wireless Switch provides continuous wireless coverage with features such as IntelliFi radio management. IntelliFi radio management provides automatic self-configuration of all radio parameters including transmit power level, channel, load balancing and interference avoidance.

For low-latency applications such as VoIP, NETGEAR ProSafe Wireless Switch delivers VoIP over wireless by providing support for call admission control, voice-aware fast-roaming and strict over-the-air QoS to deliver mobile voice capabilities.

Access Points

Wireless users on the network can now experience seamless roaming as moving between multiple access points is made simple with the ProSafe Smart Wireless Switch centralized architecture. All user states, including security and mobility information, are maintained in the centralized Smart Wireless Switch. Access points (AP's) act as logical extensions to the WFS709TP, accepting wireless traffic and sending it to the Wireless Switch over IP tunnels.

Access points supported include NETGEAR ProSafe 802.11a/g Dual Band Light Wireless Access Point (WAGL102) and NETGEAR ProSafe 802.11g Light Wireless Access Point (WGL102).

WFS709TP can also manage existing NETGEAR WG102 and WAG102 Wireless Access Point deployment by a one-time image download available on <http://support.netgear.com> that allows the existing wireless access point to be managed by the Wireless Controller.



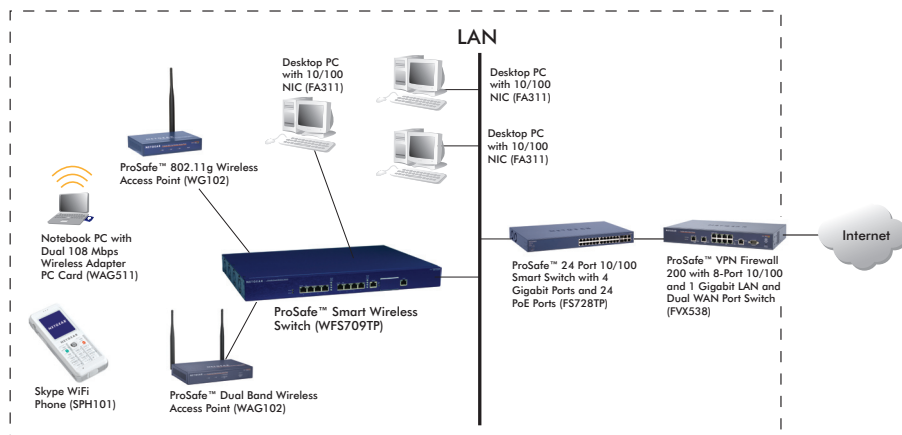
RF Planning Tool

With integrated RF planning tools, administrators can input floor plan images, number of floors, building dimensions, desired coverage and an overlap factor for fault tolerance. The planning tools compute the predicted RF characteristics of the building, plot the optimal location of the access points and display predicted coverage.

Guest Access and Redundancy

Guest access, provided by a built-in captive portal, allows guest users connecting over the wireless network restricted guest level access to the network, prohibiting them any access to the sensitive data on the corporate network.

For mission-critical applications requiring network resiliency, WFS709TP supports fault-tolerant hardware with industry standard N+1 wireless controller redundancy and access point interleaving for access point redundancy. These features make it possible to provide a wireless network with no single point of failure, guaranteeing the highest possible availability.



Technical Specifications

• Physical Specifications

- Dimensions (h x w x d):
4.45 x 44.2 x 33 cm
(1.75 x 17.4 x 13 in)
- Weight: 4.5 kg (10 lb)

• Hardware

- External power consumption: 200W Max., AC Input Voltage: 90-132V AC, 180-246V AC, AC
- Input frequency: 47- 63Hz
- Memory: Flash/RAM - 256M, CompactFlash - 256M RAM
- CPU
- LAN port 10/100: Eight 10/100Base-T PoE ports and one 10/100/1000Base-T uplink port
- Auto-MDIX-MDI-X
- Serial port: For serial console access only
- MTBF 5 years/43,800 hours
- LEDs to indicate power, port configuration and activity
- Operating temperature: 0° - 40° C
- Operating humidity: 10% - 70%
- Storage temperature: 0° - 50° C
- Storage humidity: 5% - 95% RH

• Wireless Switch Performance and Capacity

- Controlled access points: 16, supports 16 users each on average
 - NETGEAR ProSafe WGL102
 - NETGEAR ProSafe WAGL102
- Users: 256
- MAC Addresses: 4096
- VLAN IP Interfaces: 128
- Fast Ethernet ports: 8
- Gigabit Ethernet ports: One 10/100/1000Base-T
- Total throughput: 1 Gbps
- Encrypted throughput (3DES & AES-CCM): 200 Mbps

• Wireless LAN Security and Control Features

- 802.11i security (WFA certified WPA2 and WPA)
- 802.1x user and machine authentication
- EAP-PEAP, EAP-TLS, and EAP-TTLS support
- 802.11i PMK caching for fast-roaming applications
- EAP offload for AAA server scalability and survivability
- Stateful 802.1x authentication for standalone APs

- MAC address, SSID and location-based authentication
- Multi-SSID support for operation of multiple WLANs
- SSID-based RADIUS server selection
- Secure AP control and management over IPSEC or GRE
- Simultaneous centralized and distributed WLAN support
- **Identity-Based Security Features**
 - Wired and wireless user authentication
 - Captive portal; 802.1x and MAC address authentication
 - Username, IP Address, MAC address and encryption key binding for strong network identity creation
 - Per-packet identity verification to prevent impersonation
 - RADIUS and LDAP based AAA server support
 - Internal user DB for AAA server failover protection
 - Per-user session accounting for usage auditing
 - Configurable acceptable use policies for guest access

• Convergence Features

- Voice and data on a single SSID for convergence devices
- Flow-based QoS using Voice Flow Classification (VFC)
- SIP, Spectralink SVP, Cisco SCCP and Vocera ALG
- Strict priority queuing for over-the-air QoS
- DiffServ marking and 802.1p support for network QoS
- On-hook and off-hook VoIP client detection
- VoIP call admission control (CAC) using VFC
- Call reservation thresholds for mobile VoIP calls
- Voice-aware RF management for ensuring voice quality
- Fast-roaming support for ensuring voice quality
- SIP early media and ring tone generation (RFC 3960)
- Per-user and per-role rate limits (Bandwidth contracts)

• IntelliFi Radio Management Features

- Automatic channel and power settings for controlled APs
- Simultaneous air monitoring and end user services
- Self-healing coverage based on dynamic RF conditions
- Dense deployment options for capacity optimizations
- AP load balancing based on number of users
- Coverage hole and RF interference detection
- 802.11h support for radar detection and avoidance

• Wireless Intrusion Protection Features

- Integration with wireless infrastructure
- Simultaneous or dedicated monitoring capabilities
- Rogue AP detection and built-in location visualization

• Networking Features and Advanced Services

- L2 and L3 switching over the air and over the wire

- VLAN pooling for easy, scalable network designs
- VLAN mobility for seamless L2 roaming
- Proxy mobile IP and proxy DHCP for L3 roaming
- Built-in DHCP server and DHCP relay
- VRRP-based N+1 controller redundancy (L2)
- AP provisioning-based N+1 controller redundancy (L3)
- 802.1d Spanning Tree Protocol

• Wireless Switch Management Features

- RF planning and AP deployment toolkit
- Centralized AP provisioning and image management
- Live coverage and visualization heat maps
- Detailed statistics visualization for monitoring
- Remote packet capture for RF troubleshooting
- Interoperable with Ethereal®, AiropEEK and AirMagnet® analyzers
- Multi-controller configuration and management
- Location visualization and device tracking
- System-wide event collection and reporting

• Wireless Switch Administration Feature

- Web-based user interface access over HTTP and HTTPS
- Quickstart screens for easy controller configuration
- Restricted CLI access using console, disabled by default CLI access, SSH and telnet console
- Role-based access control for restricted admin access
- Authentication access via RADIUS, LDAP or internal DB
- SNMPv3 and SNMPv2 for controller monitoring
- Standard MIBS and private enterprise MIBS
- Detailed message logs with syslog event notification

• Regulatory and Safety Compliance

- CE mark (external AC/DC power supplies)

- PSE Mark (external AC/DC power supplies)
- Underwriters Laboratories (UL) 60950
- Canadian Standards Association (CAN/CSA) C22.2 No. 60950
- EN 60950 / IEC 60950 CB Scheme
- FCC Part 15 Class A
- VCCI Class A
- AS/NZS CISPR 22 Class A AS/NZS4771 (C-Tick)

Warranty

- NETGEAR Lifetime Warranty†

ProSupport™ Service Packs Available

• On Call 24 x 7

- PMB0331-100 (US)
- PMB0331 (non-US)

• Xpress HW

- PRR0331

Package Contents

- ProSafe Smart Wireless Switch (WFS709TP)
- Brown box packing
- Power cord
- Resource CD
- Serial console cable
- Rack-mount kit
- Ethernet RJ-45 Cat 5 cable - DB9 - RJ45 adapter
- Support information card
- Warranty card

Ordering Information:

• WFS709TP

- North America: WFS709TP - 100NAS
- Europe: WFS709TP - 100EUS
- Asia/Pacific: WFS709TP - 100AUS

• WAGL102

- North America: WAGL102-100NAS
- Europe: WAGL102-100EUS
- Asia/Pacific: WAGL102-100AUS

• WGL102

- North America: WGL102-100NAS
- Europe: WGL102-100EUS
- Asia/Pacific: WGL102-100AUS

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*Free basic installation support provided for 90 days from date of purchase. Advanced product features and configurations are not included in free basic installation support; optional premium support available.

†Lifetime warranty for product purchased after 05/01/2007.