# SPARK USG2000
## Service Delivery Gateway

### Features
Fully featured mid to high range service delivery gateway. The USG2000 if a fully integrated wireless or wired network management gateway. Comprising of Gigabit WAN and LAN Ethernet, The USG2000 offers high throughput as well as local storage for hosting of bandwidth demanding content.

### Virtualisation Support
The USG2000 supports virtualisation for greater flexibility and resiliency. Virtualisation allows hosting of multiple instances of SPARK as well as the option to filter content locally.

### Local Content Hosting
The USG2000 supports local content hosting to allow streaming of high definition or bandwidth demanding content.

### Captive Portal Redirector
The USG2000 is responsible for intercepting the http requests from user browsing sessions. Sessions are captured and forwarded to a destination of your choice (usually the WiFi SPARK Managed Service).

### Walled Garden
For those venues wishing to offer their guests access to a predetermined set of web pages, the USG2000 supports an unlimited numbers of free to use sites as part of its "Walled Garden" capability. Sites may be specified as IP or DNS addresses.

### Bandwidth Control
Independent control of user bandwidth upstream and downstream. User cases allow different profiles for multiple users on the same access point or access point network.

## Robust management of large WiFi or wired networks.
The USG2000 Service Delivery Gateway integrates wired, wireless and security networking features into a single 1U or Midi server form factor. The USG2000 is a scalable wireless gateway that supports up to 2000 concurrent connections and is the ideal solution for the larger or expanding business.

The USG2000 is equipped with both a Gigabit WAN and LAN ethernet delivering high-speed connectivity as well as load balancing between multiple Internet feeds. Other benefits also include bandwidth control, content filtering and the ability to deliver locally hosted and cached content directly to the user.

### Network Integration
As with all SPARK gateways, these are pre-configured to suit your exact network and business requirements .The USG2000 sits between an internet router or existing firewall and the access point network.

### IP Addressing
The USG2000 may operate in NAT mode or be granted a public IP address when internet facing. Firewalling prevents unauthorised access. On the client side the USG2000 is a fully featured DHCP server with full configuration of subnets and lease parameters. The USG2000 offers VLAN capability whereby multiple SSID's from the access point network can be served different IP addresses and be routed to a unique User Experience Portal for each SSID.

### Typical Usage Cases

- Enterprise
- Retail
- Hospitality
- Education
- Automotive
- Marine
- Accommodation

# WiFiSPARK

## MAC Authentication
The USG2000 supports full authentication by MAC address, either via preconfigured pass through MAC tables or via the WiFi SPARK Managed Service.

## Firewall
A full stateful firewall is available on the USG2000. As shipped it comes with all the rules required for support of the WiFi SPARK managed service but using iptables, complex and powerful firewall rules may be configured.

## Load Balancing
For those venues wishing to support more than one WAN, the USG2000 may be configured to support load balancing across multiple ADSL lines.

## Multiple Interface
The USG2000 is able to deploy multiple VLAN interfaces, where an SSID may be mapped to a unique User Experience. The USG2000 supports up to 132VLANs.

## Data Collection
The USG2000 supports the collection of user data via two methods. Initially this is a feature used in conjunction with the WiFi SPARK Managed Service, but secondly the USG2000 can offer detailed usage statistics (ports, protocols, MAC and IP, headers and http requests) via the SPARK data collection module.

## Content Filtering
Filtering of content is easily achieved in conjunction with https proxies or DNS based filtering. It is even possible to block ranges of IP addresses and websites directly in the USG2000 using the block list module.

## Deployment – Enterprise Network
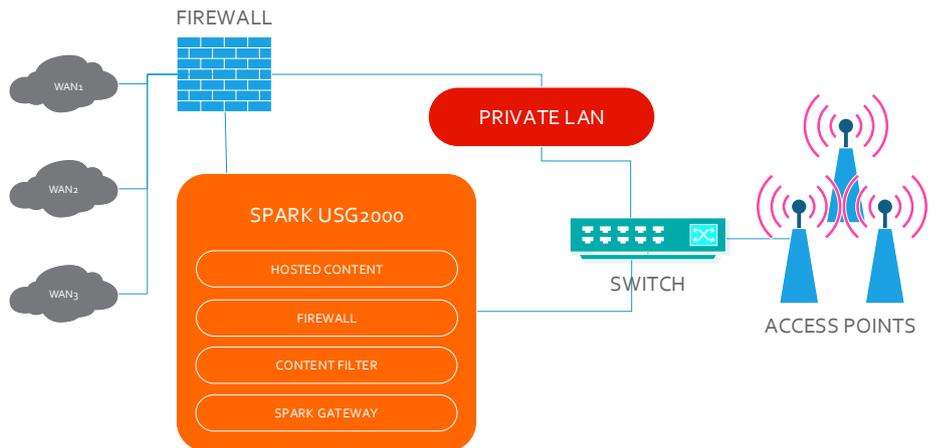


## WiFi SPARK Managed Service.
As an industry leader in managed WiFi services, WiFi SPARK offers the experience gained from deploying mobility solutions in many large Enterprises around the world.  Leverage this expertise through WiFi SPARK's Managed Service, which provides the comprehensive support program you need to deploy and maintain your USG2000 at peak performance.

### USG2000 Base Specifications

| | |
|---|---|
| Max Users Supported | 1000 |
| IP Address Range | Configurable to 4096 addresses |
| Throughput | >900Mb/s |
| LAN/WAN Port | Dual 1000Mb/s |
| CPU | Intel Pentium G2120 Processor (3.10 GHz, 2C/2T, 3M Cache, 55W TDP) |
| Processor Sockets | 1 |
| Front Side Bus or HyperTransport | DMI II (Direct Media Interface) |
| Cache | 8MB |
| Chipset | Intel C202 |
| Memory | 8GB Memory (2x4GB) 1600Mhz Dual Ranked Low Volt UDIMM |
| Storage | 2 x 500GB, SATA, 3.5-in, 7.2K RPM Hard Drive (Cabled) |
| RAID Level | C3 2HD - RAID 1 with PERC S100 (Embedded SATA Software RAID), Exactly 2 Drives |
| Video | Matrox® G200eW with 8MB memory |
| I/O Slots | One PCIe x16 G2 slot |
| Availability | Quad-pack LED diagnostics, ECC Memory, add-in RAID, TPM/TCM |
| Power | Single cabled power supply (250W) (80+ SILVER) |
| Physical Characteristics | 42.4 H x 434.0 W x 394.3 D (mm) |
| Rack Support | ReadyRails™ static rails for toolless mounting in 4-post racks with square or unthreaded round holes or tooled mounting in 4-post threaded and 2-post (Telco) racks |
| Recommended Managed Service | WiFi SPARK Managed Service |

The information in this specification sheet reflects the current technical specifications at the time of print. We reserve the right to change the technical or physical specifications without prior notice.

## Contact Us

**WiFi SPARK Ltd**
**0844 848 9555**
**info@wifispark.com**
**www.wifispark.com**

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