



# SURFSONIX® SG

## Smart Internet Access Solution for Education

### Product Overview

Surfsonix SG smart internet access solution for Education (Universities, Colleges, Schools and Educational Institute) is an all-in-one box, designed to supports upto 25,000 users in wireless & wired networks. Optimized for high performance, Surfsonix is a highly scalable, service-rich, resilient, and flexible Internet Access solution that enables next-generation wireless networks, smart devices and applications. With its exceptional features like AAA, intelligent Bandwidth Management, customizable Landing Page/Portal, WiFi & Social Analytics, Users Demographics Reports with detailed analytics of users' behavior, allows the campus to provide highly reliable, robust & secure internet services.

The gateway can be easily configured to provide internet services in classroom, library, canteen, parks, hostel and any areas of the campus. It provides easy to use multilingual web-interface. Surfsonix supports various authentication methods for secure internet access and it can be integrated with external databases (Active Directory, LDAP etc) for students & faculty authentication, and simultaneously provide access or QR codes for guest access.



#### BANDWIDTH MANAGEMENT

Intelligent Bandwidth Management provides efficient Bandwidth Management per user, VLAN, Per Session Rate Limiting, Per Session Volume Limiting, Main Line Bandwidth Management. Dedicated and reserve bandwidth for conferences or events.



#### SEAMLESS ROAMING

Surfsonix ALI (Advance Login Interface) provides seamless integration of the login process into external web server on the cloud. It allows you to create a centralized login portal for users' authentication which enables seamless roaming between multiple networks across multiple branches.



#### EXTENSIVE EDU & BI ANALYTICS

Users can authenticate using Social Media, Student Database or any external webserver. 86% of Students believes Social Media adds value to Curriculum. Gather these extensive data for Business Analytics and Understand Student behavior.



#### SMART & SECURE CAMPUS WIFI

Provide smart and secure campus WiFi solution using Application Visibility and Control module. View in Real Time all the applications being accessed. Apply policy based traffic shaping or advance bandwidth management on application and protocol level. Create policy based internet access based on different privileges.

FACULTY EXPERIENCE

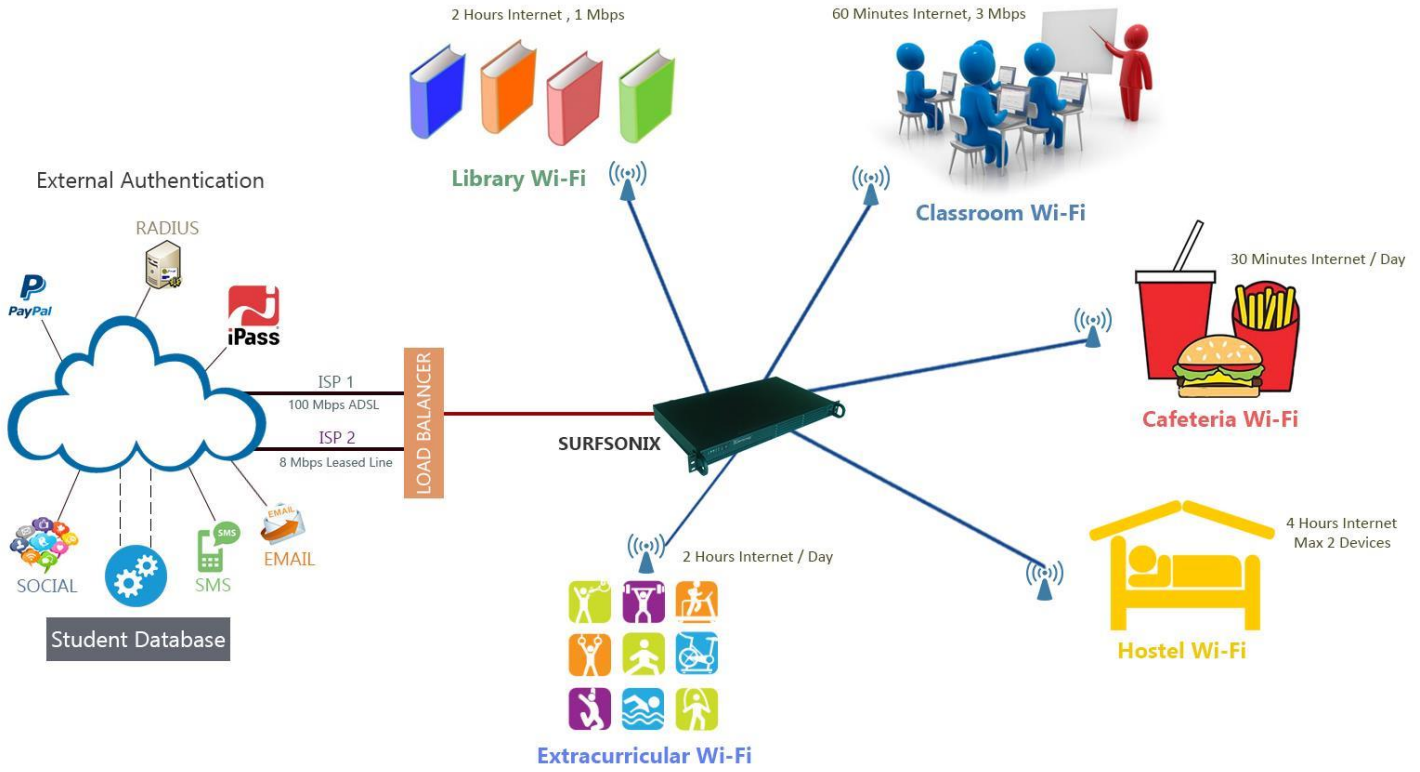
STUDENT ENGAGEMENT

WIFI ANALYTICS

CAMPUS TRENDS

SECURE WIFI

### Surfsonix Deployment Scenario



### Surfsonix SG Appliances

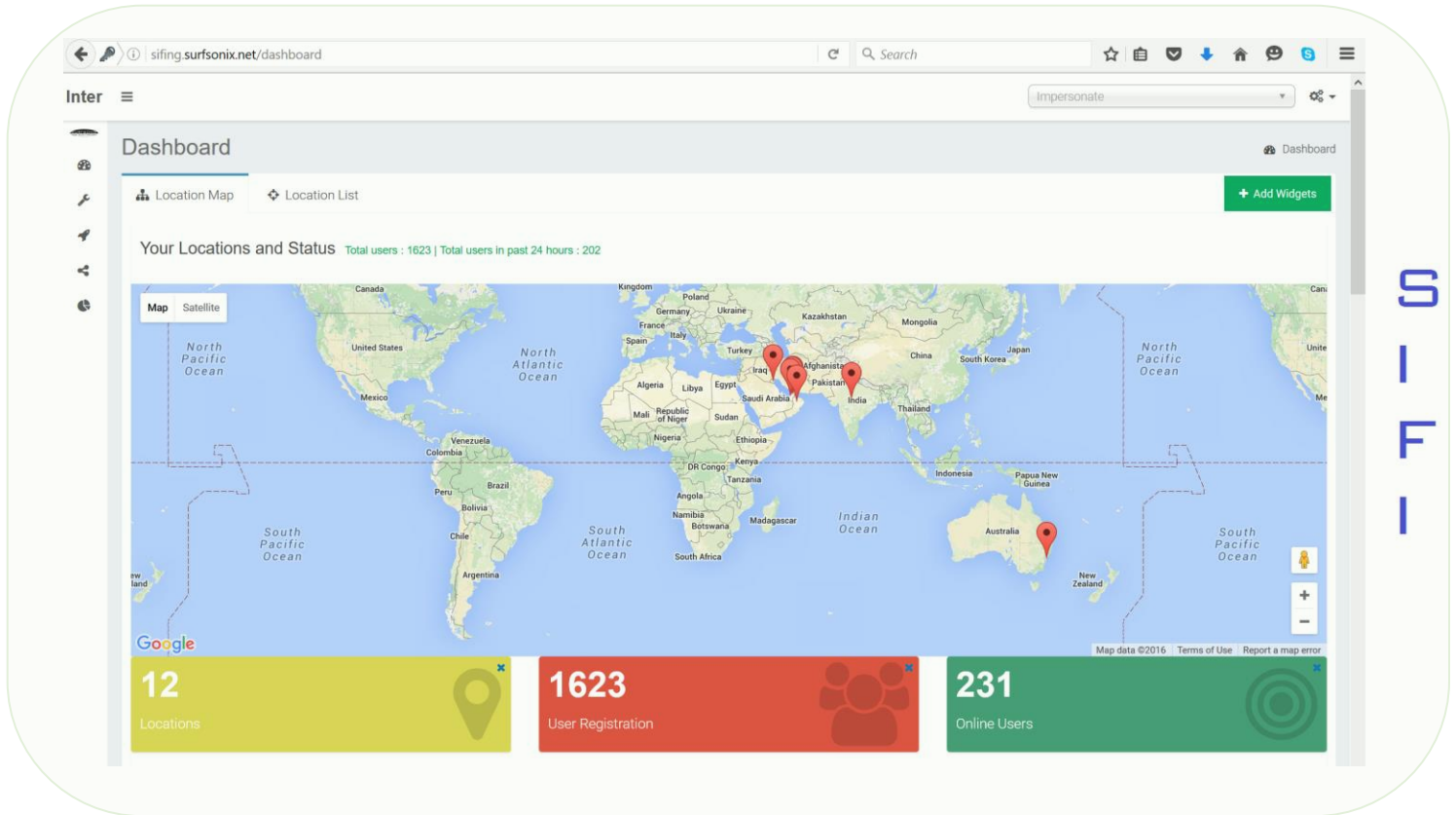


Features of Surfsonix SG Gateway:

Features	Descriptions
Real PLUG & PLAY Connection	Static and Dynamic IP Configuration by-pass
	By-Pass name, number and script based Proxies (both transparent and non-transparent)
Authentication Types	Internal and external (AD, Radius Server, LDAP) databases, SMS, Email, Social Media, iPass, PayPal, Credit Card and Bank Payment Gateway, QR Code
Multi-Properties Roaming	Enabled with Surfsonix ALI and Centralized Authentication Web Server
Advance Login Interface (ALI)	Surfsonix ALI allows you to create a centralized corporate login page using central user authentication
Billing Types	Billing by time, date, data volume, bandwidth, free per user
Intelligent Bandwidth Management	Per user, per VLAN, per Session Rate Limiting, per Session Volume Limiting, Main Line bandwidth management. Improved QoS during congestion
Guaranteed Bandwidth	Allows you to define a fixed guaranteed bandwidth for certain users
Seamless Roaming	Allows seamless roaming from wired to wireless networks without disconnecting the existing session
Autologon devices	Autologon devices can be added by their MAC and/or IP address
Definable login hours for Autologon devices	Control internet access based on time for the autologon devices
Social Login Module - basic	Allows authentication using Social Media like Facebook, Google Plus and Windows Live. Property can ask a user to Like/Follow their Social Media Channels or post a message on the user's timeline
SMS / Email Authentication	Allows authentication using SMS and Email
Remember Me	Automatic re-login of already registered devices
Data Collector	Collect additional customer information at logon (email, name, etc.) for marketing and security
Identify Repeat Users	Surfsonix identifies users that have visited the property before and display welcome message on the Landing Page
User Survey	Allow users to complete a survey before accessing the Internet
Application Visibility & Control	Allows real-time view of all applications, policy-based application access, traffic-shaping for applications like P2P (e.g. Bit Torrent), VoIP (e.g. Skype), Instant Messaging, Facebook, YouTube and many more
Multilayer Gateway	Operate in Layer 2 and Layer 3 modes
Security	AAA system (Authentication, Authorization, Accounting)
	IEEE 802.1X network authentication (PEAP, TTLS)
	Private VLAN Support (room / port isolation)
	Anti-Spam & Anti-DOS
	802.1 q VLAN Security
	Guests isolation (prevent users from seeing others data)
	Integrated Stateful-Firewall (isolates Office-LAN from Surf-LAN)
	MAC Filtering
	Simple and Advanced HTTP Content Filter
	Port Filter
	Supports major Virtual Private Networks (VPN)
	DNS Tunneling protection
	Custom HTTP Proxy Settings (Parent Proxy)
	Logging of relevant actions (e.g. logon, logoff, ticket creation)
	Deny Roaming Between VLANS
	Zone based access - If configured then the tickets would be only valid in certain zones
Surfsonix does not push any cookies to the clients. Hence it takes care of complete client security	
AES 256 bit SSL encrypted authentication	

Built-in SMTP Relay Agent	Send and receive email without using external relay agent
Multilingual Web Admin and Guest Logon	Support multiple languages like French, German, Arabic, Italian, Greek, Japanese, Romanian, Russian, Hebrew etc.
Customized Guest Logon Page	Up to 40 customizable portal/login pages
Flexible Accounting	Billing by time / volume/ date and bandwidth
	FLAT RATE: A flat rate scheme provides access to the Internet for a limited duration (i.e. 6 days) and limited volume
	TIME RATE: Time rate tickets allows user to log off to save the remaining time credit which can be used in the future
Simultaneous login of multiple devices	In the recent times guest check in to the hotel with more than one device. A guest can use the same ticket to login to multiple devices simultaneously using this feature
Management	User friendly Admin interface. Supports centralized management & multi-level administration control
Live Connection Logs	Allows the administrator to view and analyze traffics in real time i.e. no. of users online, Bandwidth usage per user, load on main internet line. Support remote loggings of all data and activities including URL Tracking, Clients Source MAC/ IP, destination MAC / IP and Protocol
Ticket Printer	Supports 40 ticket printers for one touch ticket printing. Can have multiple regular printers for normal ticket printing
Support for VPNs	Supports IPsec, PPTP, L2TP, SSL VPNs with or without Public IP
Public IP for VPN	Supported in both Bridged and Routed Modes
Backup and Recovery	Support local and remote system backup allowing swift system recovery
Upstream Proxy	Supports configuration of upstream proxy
Mode of operation	Free logon, Auto logon or Paid services
User Notification	Notifying users about the credentials after registration via SMS or Email
Online Payment methods	Integration with PayPal, Credit Card, Bank Payment Gateway and Safer Pay
Reporting / Central Management	Central Management System for configuration, management and reporting. Extremely powerful and detailed reporting of application reports, social media analytics, user preferences, system messages, revenue, ticket statistics, users' connections, http-proxy logs, Detailed Revenue Statistics incl. Export, Real-time Logging (Login, Logoff, ...), System Notifications & Remote Syslog, Monitoring of Devices located in Surf-LAN incl. Notifications, SNMP Integration and many more.

Integration with SIFI Cloud Service:



Features	Descriptions
Analytics and Reports	Advance and detail reports of New and Repeat users
	Users/visitors details like demographics, gender, preferred devices, browsers, OS etc.
	Analyze and display Visitors/Users information like login sources, login duration, login preferences, Age etc
	WiFi Analytics for visitors/users
Advance Guest Portals/Login/Splash Pages	Network Analytics and reports about most popular OS, Devices, Browsers etc being used by the visitors/users
	Centralized management and deployment of Guest portals/Landing/Splash pages on a global level or per property level
	Extremely flexible and customizable landing/splash page or guest portals
	Conditional redirection after login (based on age, gender, visits, birthday, platform, browser type, login source or any combination of these fields)
Smart Marketing	Cloud hosted and managed
	Multiple sources of Logins (Social Media, Form, Vouchers/Tickets and Room)
	Display of advertisements on the login portal based on user types
	E-Campaign based on number of visits, top customers, birthday etc
	Built-in digital marketing tools
	Send marketing shots based on location or global basis

	Filter guests data based on several criteria
	Generate Facebook "likes"
Enhanced Guest Experience	Guests visit reports for all the locations
	Guests recognition and greetings
	Seamless Roaming between properties/venues
	VIP Guest recognition and notifications
Intelligent Bandwidth Management	Intelligent bandwidth management based on login sources (Social Media, Form, Tickets/Vouchers, Room)
Security	VLANs
	Protection of Logon/splash page from unauthorized access
	Verification of Visitors/Users via SMS
Management	Cloud hosted
	Centralized Management of all the properties/venues from single dashboard
	All locations visible and accessible on Global Map
	Admin Users with different levels of privileges per location or global
Presence Analytics	Track devices, hence customers, even if they are not logged in
	Know visitors' behaviours by their dwell time, passerby vs genuine, repeat vs new, bounce rate, confirmed visitors, average visits and frequency of visits
	Geo-fencing technology
Location Analytics	Location based services
	Heat mapping
	Geo-fenced footfall count
	Way finding and point of interests
	Dwell time
Guest Survey	Allows the venue to receive customer feedbacks in real-time
	Survey is displayed during the login
	Survey can be categorized for the walk-in users, in-house guests or for every users
	Frequency of Survey can be based on per MAC per user or during login

Specifications for Surfsonix SG Appliances:

Specifications	Appliance Models				
	50SX2	70SX	600SX	1000SX	2000SX
Maximum users	500	750	6000	10000	25000
Minimum users	100	100	100	100	100
Maximum VLANs	1024	1024	1024	1024	1024
Supported NIC Interfaces	10M/100M/1G	10M/100M/1G	10M/100M/1G/10G	10M/100M/1G/10G	10M/100M/1G/10G
Network Ports	1 x MGMT, 1 x WAN, 1 x LAN	1 x MGMT, 1 x WAN, 1 x LAN	1 x MGMT, 1 x WAN, 1 x LAN	1 x MGMT, 1 x WAN, 1 x LAN	1 x MGMT, 1 x WAN, 1 x LAN
Power Supply	12W DC Power Supplies	12W DC Power Supplies	200W Low Noise AC-DC power supply	400W 1U Redundant Power Supplies	600W Redundant High-Efficiency Power Supplies
Gross Weight	2 KG	2 KG	14 KG	16 KG	22 KG
Dimensions	Width 6" x Height 1" x Depth 6"	Width 6" x Height 1" x Depth 6"	Width 17.2" x Height 1.7" x Depth 11.3"	Width 17.2" x Height 1.7" x Depth 16.9"	Width 17.2" x Height 1.7" x Depth 19.98"
Included Modules and Features	Feature License: Automatic login with QR Code, Data Collector , Billing Control, Dynamic Bandwidth and Volume Control, Bypass Device by MAC/IP, Client / Client Protection, DNS Tunneling Protection, DOS Prevention, Multilingual Portal Design module, Mobile Login Page, Walled Garden, IEEE 802.1X, Port Filter, Ticket Printers module, Syslog & Infrastructure Devices Monitoring, Plug & Play module and SMTP proxy, Online Payment module, Advance Reporting Tools, Basic firewall, Basic web filter, Lawful Intercept Reporting, Detailed Revenue Statistics incl. Export, Realtime Logging, multimedia module for connecting IP TV, Messaging module for SMS and Email Authentication, External user authentication to various data sources (Database, LDAP, Radius)				
<b>Additional Modules (Add-On)</b>					
Guests Loyalty Program	Advance Guests Loyalty Program allows identification of guests/users based on loyalty program/code, loyalty based package selections and new guests enrollment.				
Property Management System	PMS Interface License for In-House Guests.				
Advance Login Interface	Surfsonix Advance Login Interface for customized landing page and advanced login flow, roaming between multiple properties & centralized authentication.				
Application Visibility Control	Allows real-time view of all applications, policy-based application access, traffic-shaping for applications like P2P, VoIP, Instant Messaging, Facebook, YouTube etc.				
Surfsonix SiFi	Advance Social Media Authentication, WiFi Analytics & Reports, WiFi Monetization, Sub-Location feature to understand users location without VLAN or Location Based Services, Sales & Marketing tools,, Real-time Analytics, Real-time & Advance Customer Engagement tools.				
App Integration Module	Enable users to authenticate and browse internet through mobile application. Comes with extensive reports like Daily App download report, Total App download report, and Unique download report. Helps customer get insights of the users who have downloaded the app.				
Database Integration	Allows customer to import their user's database or integrate with their existing system.				
Location Based Service	Identify user's location, presence, dwell time, detected vs connected devices, repeat rate, capture rate and bounce rate. Heatmap, Geo-Fencing and Way Finding. Compatible with Cisco, Cisco Meraki, Aruba and Ruckus Wireless.				
Ad Module	Display relevant ads on the splash page based on user profile and demographics. The ad campaign can be configured to display ads just one time, display ads on multiple days or repeat interval.				

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