WARM WELCOME

Expect More

Data Router

GSM/3G/HSPA

Firewall

VPN

Internet

Wi-Fi

Voice Mail
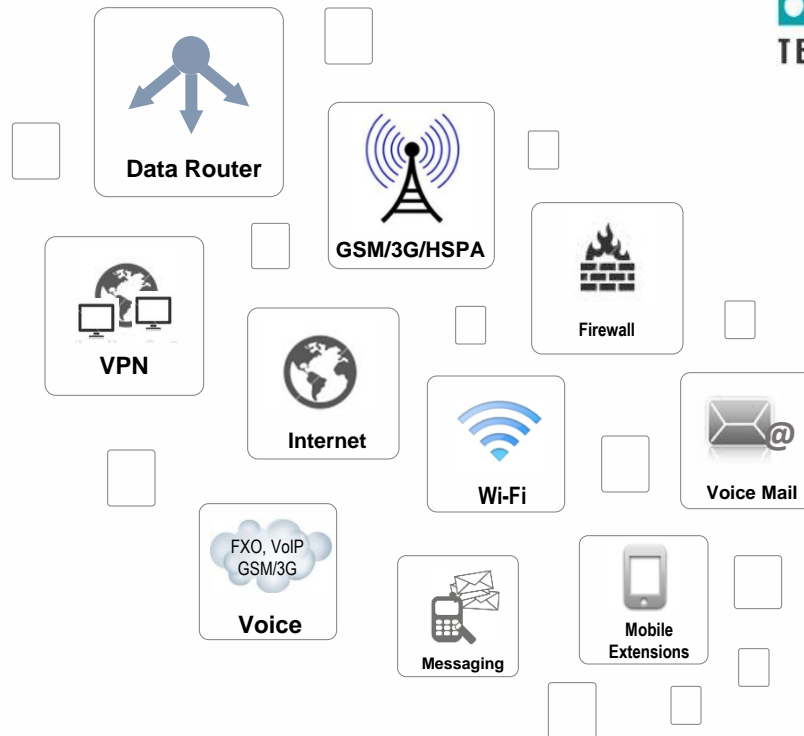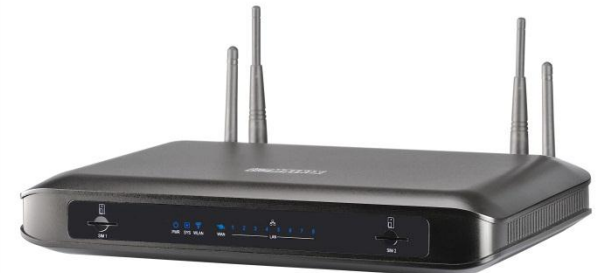
FXO, VoIP
GSM/3G

Voice

Messaging

Mobile Extensions

Matrix NAVAN CNX200

Office-in-a-Box Solution for Small Businesses

Winner of 'Best of Show' by TMCnet, ITEXPO 2013 Miami

Presentation Outlook

- Challenges for Small Businesses

- The Solution – Matrix NAVAN CNX200

- Target Customers

- Solution Overview

- System Resources

- Key Features

- Technical Specifications

Challenges for Small Businesses

| Challenges	Solution – NAVAN CNX200
Managing too many technologies and devices	Integrated solution to manage voice and data networks
Connectivity with remote offices	Secure integration with branch offices over IP telephony and VPN
Minimize telephony costs	VoIP, GSM and POTS lines for Cost-effective Communications
Powerful tools to increase employee productivity	Advance call capabilities, teleworking, mobility, voice mail, messaging
Future-proof solution	Ready to integrate SIP based solutions – SIP Phone, IP-DECT, Door Phone, ITSPs

Solution – NAVAN CNX200

Ideal for Small Businesses and Branch Offices, NAVAN CNX200 is a Single Box Solution that Offers Voice, Data, Wireless, Mobility and Messaging Features from a Compact and Converged Platform.

PBX	ROUTER	Wi-Fi AP	LAN	GSM FCT

All-in-One Office Solution
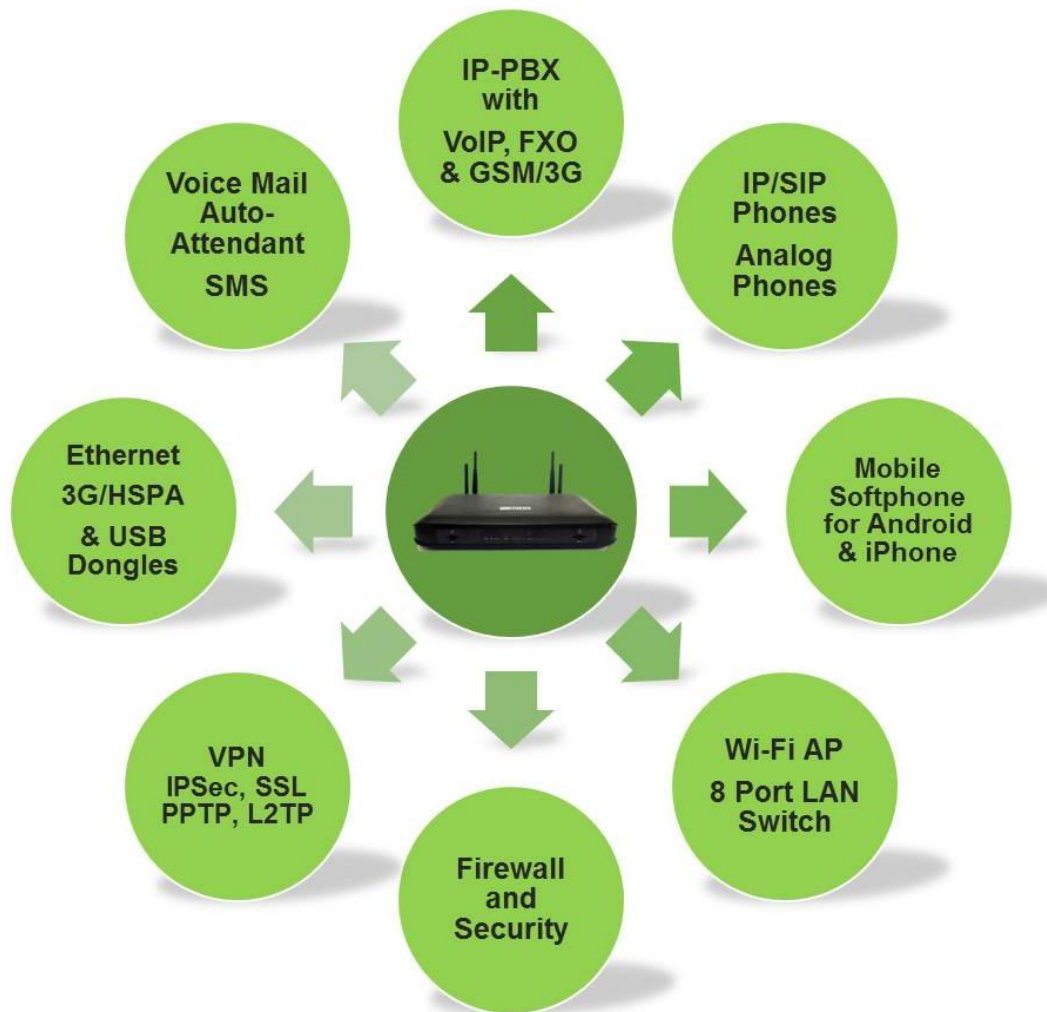
Target Customers

Small Businesses

Specialized Businesses like Consulting Firms, Architects, Hospitals and Small Clinics

Challenges

› Smart communication infrastructure without complexities
› Professional services for premium customers

Solution

CNX200 All-in-One Office Solution with

› Built-in Wi-Fi and 8 Port Switch for IP Phones/PC
› Analog and IP Phones Connectivity
› Mobility with Android Softphone Client and IP-DECT
› Voice Mail, Auto-attendant, Call Recording

Branch Offices

Enterprise Branch Offices, Nation-wide Franchise, Remote Offices

Challenges
› Connectivity with other branches and main offices
› Information sharing such as inventory, sales data etc.

Solution
CNX200 All-in-One Office Solution
› IP Telephony Features with Pre-activated 8 SIP Trunks and 8 IP Users
› Virtual Private Networking for Secure Data Exchange over Internet Connection

Businesses with High Mobility

Retail Chains, Travel Agencies, Warehouses, Real Estate, Trading Companies

Challenges
› Anywhere anytime connectivity for communications
› On-the-move access to inventory, sales data

Solution
CNX200 All-in-One Office Solution
› Built-in Wi-Fi Access Point for Wireless Voice and Data Access
› Android and iPhone Client for Mobility from the Field (8 Pre-activated Clients)
› IP-DECT Phones Support for Inside Office Mobility

Service Providers

Mobile Operators, Managed Internet Service Providers, Internet Telephony Service Providers

Challenges
› More revenues from existing and new customers by leveraging existing communication & IT infrastructure and services

Solution
CNX200 All-in-One Office Solution
› Bundle managed communication services and broadband internet over 3G/HSPA or Ethernet Leased lines
› Offer Office-in-a-box solution with voice, internet, cellular, wireless and VPN services

Solution Overview
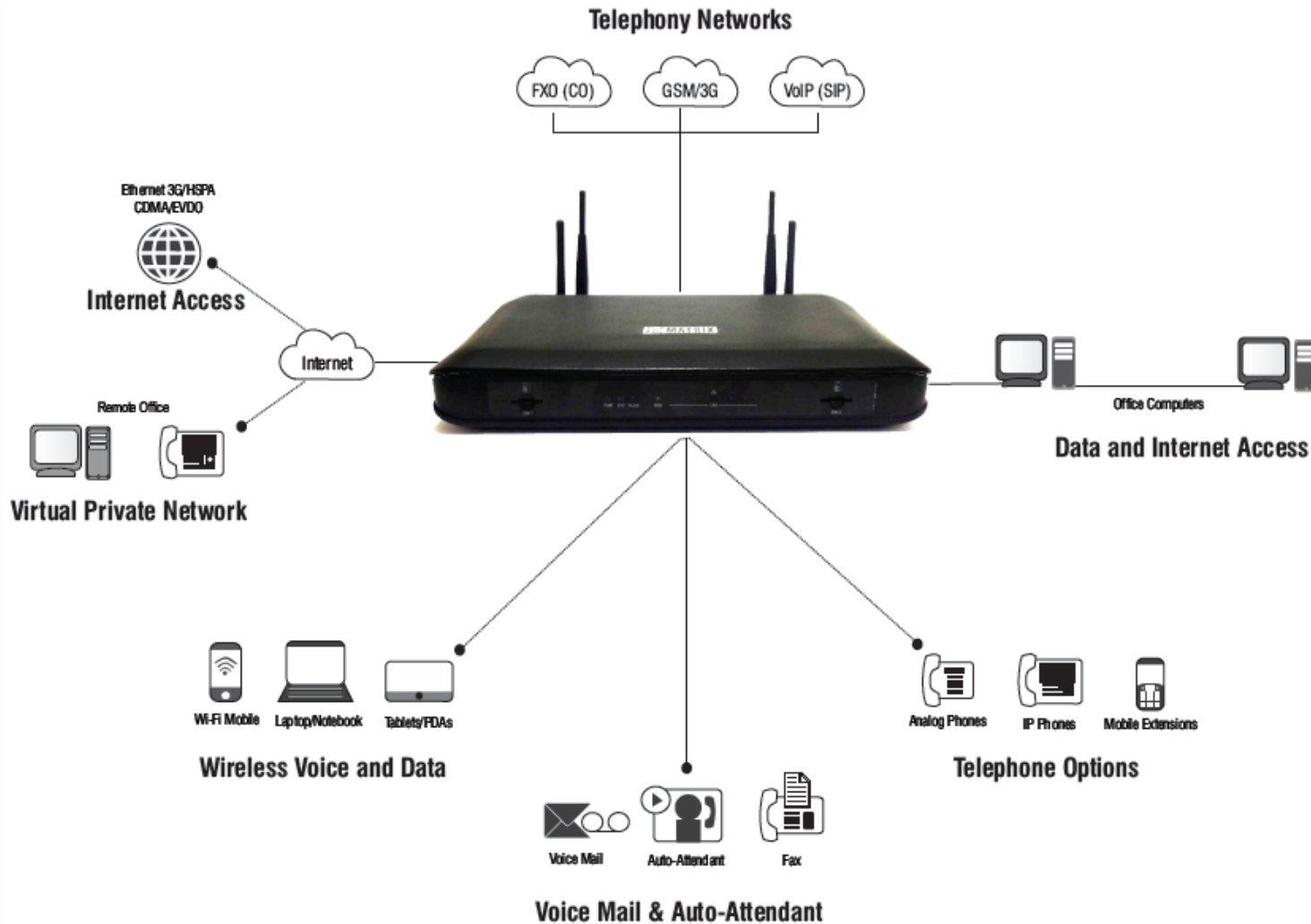
System Resources – Front View
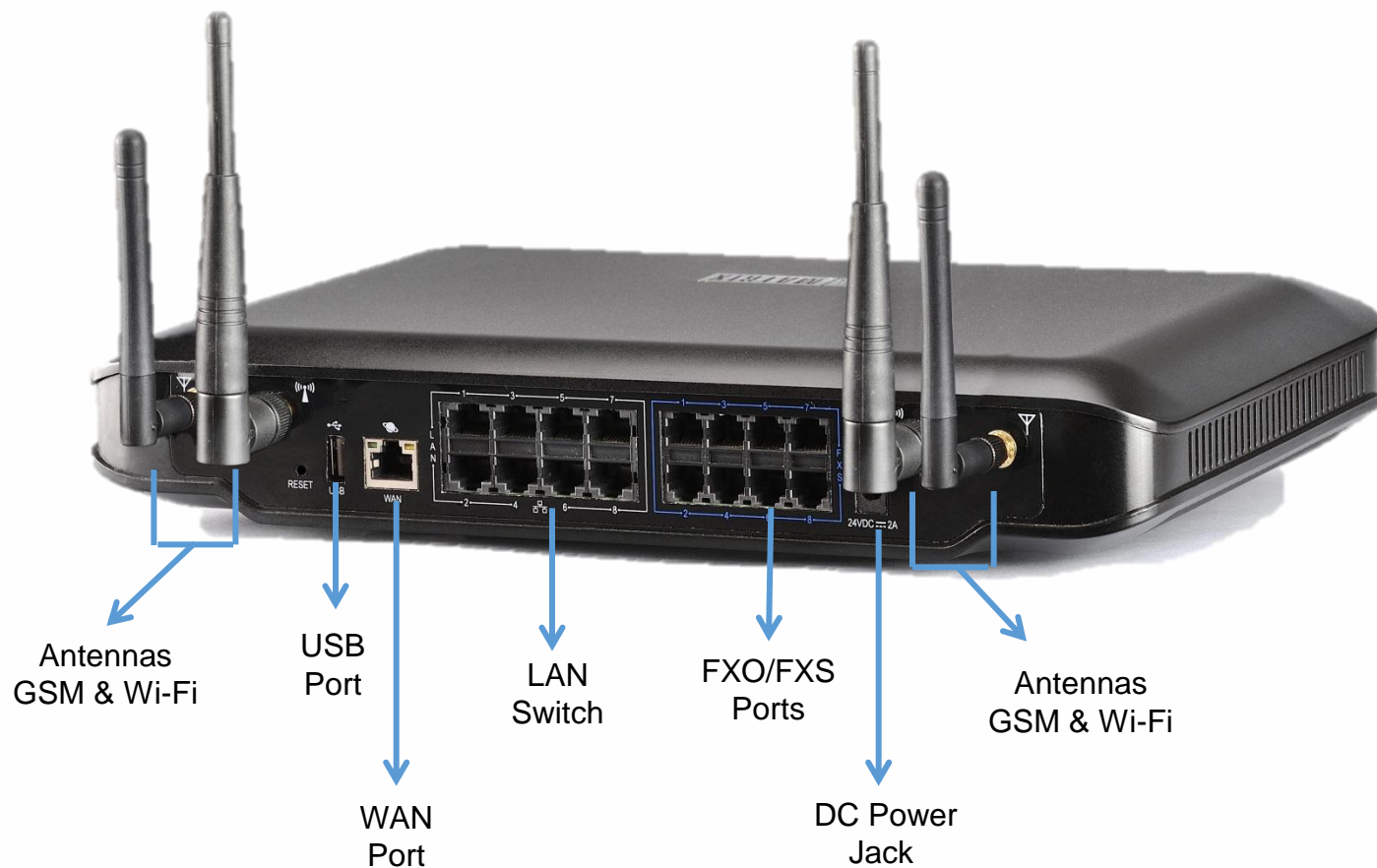

GSM/3G 1
SIM Slot

GSM/3G 2
SIM Slot

LED Indications for
Power, System, WLAN, WAN
and LAN Switch Ports

System Resources – Rear View

Antennas GSM & Wi-Fi

USB Port

LAN Switch

FXO/FXS Ports

Antennas GSM & Wi-Fi

WAN Port

DC Power Jack

Flexible Phone Options

IP Phones

Android/iPhone Softphone Clients

IP-DECT

Analog Phones

SIP Phones

PC Soft phones

Key Features

- Full IP-PBX and Key System Functionality

- Flexible Phone Options

- Integrated Data Router

- Internet Access

- GSM/3G Connectivity

- Softphone Clients for Android/iPhone

- Workplace Mobility

- SMS Server

- Virtual Private Networking

- Firewall and Policy-based Access

Full IP-PBX and Key System Functionality

- Full IP-PBX with Analog, VoIP and GSM/3G Trunks Connectivity

- Enterprise-grade Call Management Features

- Range of Phone Options – Analog, IP and Mobile Extensions

- Teleworkers and Mobile Workforce Integration

- Simple Management with Web-based GUI

- Voice Mail and Auto-Attendant Integrated to the System

Integrated Data Router

- Data Routing between LAN and WAN

- Integrated 8 Port Ethernet Switch

- Integrated Wi-Fi Access Point (IEEE 802.11 b/g/n)

- Advance Routing Options:

✓ Static Routing

✓ Port Forwarding

✓ Port Triggering

Internet Access

- Multiple WAN Internet Options

  - ✓ Ethernet WAN

  - ✓ Embedded 3G/HSPA Module

  - ✓ USB Dongle – 3G/HSPA/EV-DO*

- Automatic Handover in event of Failure

GSM/3G Connectivity

- Cellular Network Connectivity for Voice and Data Access

- Wireless PBX for Areas without Fixed-line Networks Availability

- Local Area Calls over Circuit switched Cellular networks

- VoIP Calls over UMTS (3G) Networks

- Cellular Internet Speed up to 7.2 Mbps Downlink and 5.76 Mbps Uplink

Softphone Clients for Android/iPhone

- Wireless Extensions for On-the-Move Office Staff and Field Workers

- Mobile Softphone App for Android/Apple Smartphones

- Access all the Call Management Features from Mobile Phone

- ✓ Dialing by Extension Number, Local Trunk Access, Call Transfer, Forward, Voice Mail, etc.
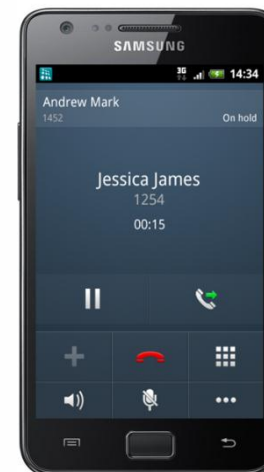
Video Telephony

- Experience the New Face of Collaboration with Video Telephony

- Place Free Video Calls between PC/Mobile Softphones and Video Telephones

- Video Call Features – Hold, Transfer, Forward, 3-way Conference

Workplace Mobility

- Complete Freedom from Being Tied to the Office Desk

- Integrated Wi-Fi Access Point (IEEE 802.11 b/g/n) for Wireless Voice and Data Access

- Make and Receive Voice Calls over Local Trunks – FXO, GSM/3G and VoIP

- Interoperability with leading cordless IP-DECT phones

SMS Server

- Mass Marketing Tool

- Use Built-in GSM/3G Port for

  Sending and Receiving SMS

- Built-in SMS Server

- SMS Gateway Support

- SMPP Protocol Support

Virtual Private Networking

- Secure Exchange of Voice and Data over Public Internet

- Enhance Workforce Collaboration by Linking Geographically Distant Offices

- Advance VPN Tunneling Protocols - SSL, IPSec, PPTP and L2TP
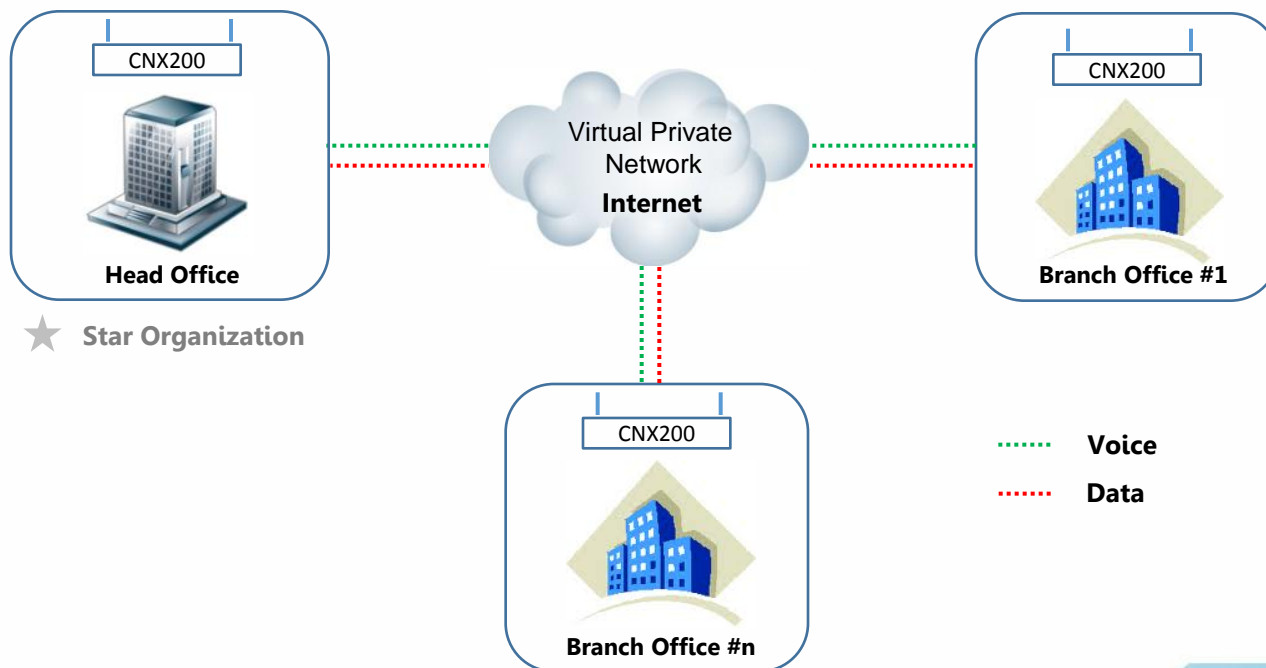
Firewall and Access Policies

- Advance Firewall Protection Against External Threats

- Protection Against Denial of Service Attacks and Intrusion Prevention

- List of Access Control and Black Listed Ports/Destinations

- Advance Firewall Features such as Stateful Packet Inspection, Advance NAT and STUN,

- MAC Address Filtering, AES/MD5 Authentication etc.

External Threats

Internet

Built-in Firewall Protection

Internal Data Network
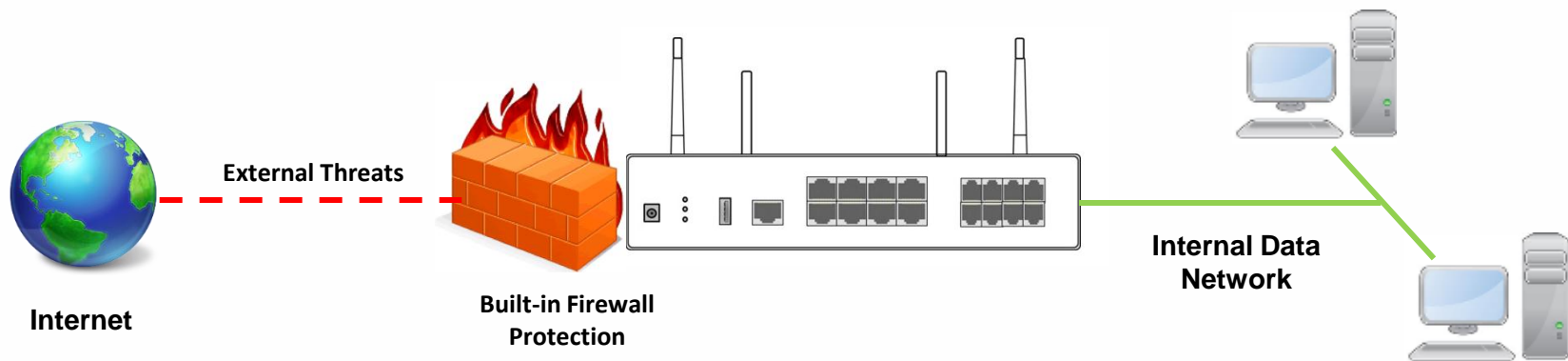
Technical Specifications

Voice Networking

2/4* Analog Lines (FXO)	To Connect Analog Telephone Lines
4/6/8* Analog Users (FXS)	To Connect Single Line Telephones, Fax, PoS devices
8 VoIP (SIP) Trunks	To Subscribe Services from 8 Different SIP/VoIP Providers Ready Interoperability with leading VoIP Carriers
Up to 24 VoIP Users	24 Users (8 Pre-activated, Another 16 with Licence Key) Matrix SPARSH VP248 IP Phones, SIP Phones, PC Softphones, Mobile Extensions
Up to 2 GSM	To Make Voice Calls over Cellular GSM Networks Quad-Band (850/900/1800/1900 MHz) Support
Up to 3G/GSM	To Make Voice Calls and High-speed Internet Access over 3G/HSPA Networks Tri-Band UMTS/HSPA (850/900/1800 MHz and 900/1800/2100 MHz) Support
VoIP-GSM-PSTN Gateway	Built-in Gateways for Call Routing between GSM, VoIP and PSTN lines
Call Management	Call hold/transfer/forward/park/conference, Toll Control, Class of service, Account codes, Hunt groups, Day/Night modes, Speed dial and lot more.

* Variant Specific

Technical Specifications

IP Telephony

Standard	SIPv2 (RFC3261)
VoIP Codecs	G.711 (A/μ Law), G.723, G.729AB, GSM-FR and iLBC
VoIP Channels Concurrent VoIP Calls	12 VoIP Channels 6 Concurrent VoIP Calls
Call Forking	Parallel Ringing on Maximum Three IP Devices
Fax over IP	T.38 and Pass-Through
Quality of Service	SIP and RTP
Echo Cancellation	G.168 Line Echo Cancellation
Dynamic DNS	Client to subscribe Dynamic DNS service
Peer-to-Peer Calls	1000 Entries
NAT and STUN	For IP Devices located behind NAT Router and LAN
VoIP Security	TLS/SRTP

Technical Specifications

Data Networking

LAN Switch	8 10/100 Mbps Switched LAN Ports
WAN Options	Ethernet WAN - 1 10/100 Mbps WAN Port
	3G WAN - 2 3G/HSPA Modules (DL/UL – 7.2/5.76 Mbps)
	USB Port – 3G/GSM/CDMA/EVDO* USB Modem Connectivity
Quality of Service (QoS)	Applications, DSCP, Destination/Source MAC/IP
Advance Routing	Port Forwarding/Triggering, Static Route, DNS Proxy, MAC Address Cloning
Networking Protocols	TCP/IP, UDP, RTP, SNTP, NAT & STUN, DHCP, DNS, Dynamic DNS

Technical Specifications

Wireless LAN (Wi-Fi)

Standard	IEEE 802.11 b/g/n (2.4 GHz)
Security	WPA, WPA2, WEP
Wi-Fi Features	Wireless Multimedia (WMM)
	MAC Address Access Control
	Channel Width and Frequency Selection
Antenna Type	2 Omni-directional Antennas with Diversity
Standard	IEEE 802.11 b/g/n (2.4 GHz)
Security	WPA, WPA2, WEP

Technical Specifications

Virtual Private Networking

Virtual Private Network	Remote Access (Server)
	Site-to-Site (Client)
VPN Tunnelling	Open VPN (SSL), IPsec, PPTP, L2TP Protocols
VPN Tunnels	Up to 80 VPN Tunnels
	(20 Tunnels for each SSL, IPsec, PPTP and L2TP)
Encryption	Hardware based AES/DES/3DES, MPPE
Authentication	MDS, SHA-1
IKE Authentication	Pre-shared Keys, Digital Signature

Technical Specifications

Firewall and Security

Firewall Protection	SPI Firewall
	Intrusion Detection & Protection
	Block Ping/ICMP/IDENT
	Port Scan Restriction
	De-militarized Zone (DMZ)
	MAC Address Filtering
Access Control & Content Filtering	Keyword
	Website Address(URL)
	IP Address
	Port
	MAC Address
Certificate Management	Self-signed and Trusted Root Certificate Generation and Management

Technical Specifications

Voice Mail System

Auto-Attendants	Greetings by Day, Night, Break Hours and Holidays
	Attend 5 Callers at a time
	4 Graphs each with 64 Nodes
Number of Mailboxes	32 User and 5 Group Mailboxes
Greetings and Messages	Personalized Greetings for Mailbox Users
Unified Messaging	Voice Mail to Email Notification
Notification Alerts	Message Wait Lamp, Change in Dial Tone, Voice Message, LED indication
Conversation Recording	Built-in 4GB Storage for up to 72 Hours Recording
	(Requires License Activation)

Technical Specifications

Monitoring and Management

Administration	Web-based Remote Management (HTTP/HTTPS) System Engineer and Administrator Mode
Localization	Call Progress Tones, CLIP Variants, Impedance Matching, Time Zones, Day Light Saving, Date-Time Format
CDR Reports	Call Records (Incoming, Outgoing, Internal) with Various Call Filters
LED Indications	Total 12 LEDs for Power, System, WLAN, WAN, LAN Switch Ports
Back-up	System Software, Call Detail Records (CDR) and Configuration
Languages Supported	English, Spanish, Portuguese, French, German, Italian

Ordering Information

Standard Configuration

CNX244	4 FXO, 4 FXS, 8 SIP Trunks, 8 IP Users (Expandable up to 24 Users), Wi-Fi , 1 USB and 8 LAN Switch Ports
CNX226 2G	2 FXO, 6 FXS, 8 SIP Trunks, 8 IP Users (Expandable up to 24 Users), Wi-Fi, 1 USB, 8 LAN Switch Ports and 2G/GSM Module
CNX226 3G	2 FXO, 6 FXS, 8 SIP Trunks, 8 IP Users (Expandable up to 24 Users), Wi-Fi, 1 USB, 8 LAN Switch Ports and 3G/GSM Module
CNX226 2G2	2 FXO, 6 FXS, 8 SIP Trunks, 8 IP Users (Expandable up to 24 Users), Wi-Fi, 1 USB, 8 LAN Switch Ports and Two 2G/GSM Modules
CNX208 3G2	8 FXS, 8 SIP Trunks, 8 IP Users (Expandable up to 24 Users), Wi-Fi, 1 USB, 8 LAN Switch Ports and Two 3G/GSM Modules

License Packages

CNX200 VMS	License to Enable Voice Mail System
CNX200 SMS	License to Enable SMS Gateway
CNX200 IP8	License to Activate 8 IP Users

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- Number of Slides: 36

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Thank You