BROADWORKS & BROADCLOUD PRODUCT GUIDE CPE Products & Solutions for BroadSoft

CPE Products & Solutions for BroadSoft-Based Communications Services

Patton's comprehensive, robust, and complementary hardware, software, and Cloud products enhance the value of Broadsoft hosted UC and SIP Trunking solutions. We enable and empower service providers to efficiently deliver quality communications services to their business subscribers from BroadWorks and BroadCloud.





Contents

BroadSoft + SmartNode	T1/E1/PRI VoIP Routers10
Primary Use-Cases of Patton's CPE for BroadCloud 4	BRI VoIP Routers10
SIP Trunking5	WAN Integrated IADs
Hosted Telephony5	Analog VoIP IADs
Converged Voice & Data Managed Services5	T1/E1/PRI VoIP IADs
Branch Office Managed Voice & Data5	BRI VoIP IADs (Including Mixed Analog & BRI)11
Value Proposition	ALL-IP Session Border Controllers (eSBCs)
BroadCloud & BroadWorks Certifications	All-IP Session Border Controllers
Purpose-built CPE with Cloud Orchestration6	eSBCs with TDM Ports
Facilitating a Pain-Free Migration to ALL-IP6	VDSL2/ADSL2+ Converged CPE
ALL-IP Migration & Transformation	
Products for BroadSoft UC9	VDSL2/ADSL2+ All-IP Models
Basic VoIP Gateways and ATAs	VDSL2/ADSL2+ Units With TDM Ports
Analog VoIP Gateways	G.SHDSL Converged CPE
T1/E1/PRI VoIP Gateways	G.SHDSL Units With TDM Ports
BRI VoIP Gateways (Including Mixed Analog & BRI)9	Ethernet-Over-Fiber Converged CPE
Edge Routers with Integrated TDM VoIP Gateway 10	Ethernet-over-Fiber (SFP) Converged CPE14
Analog VoIP Routers10	BroadSoft UC Resources





Copyright and Trademark Statement

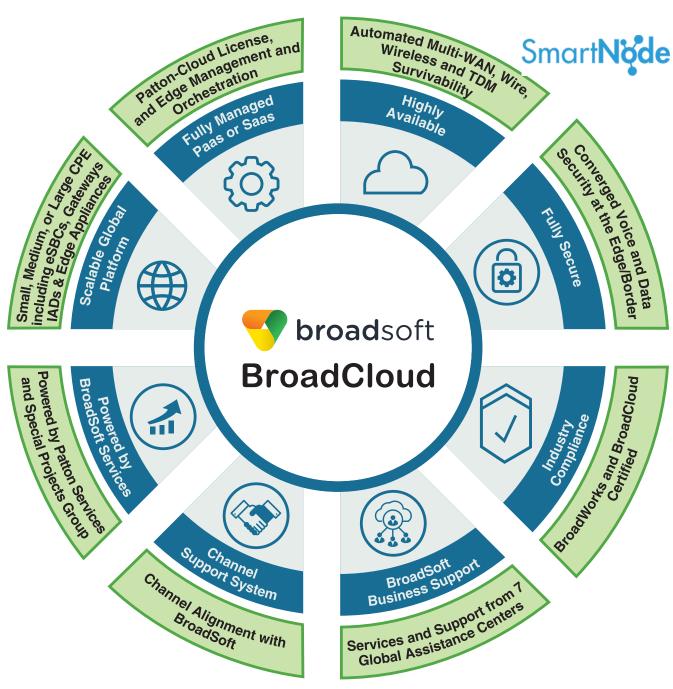
Copyright © 2018, Patton Electronics Co. All rights reserved.

Patton is a registered trademark, and the term SmartNode is a trademark of Patton Electronics Company in the United States and other countries. All other trademarks or registered trademarks are the property of their respective owners.

BroadSoft + SmartNode

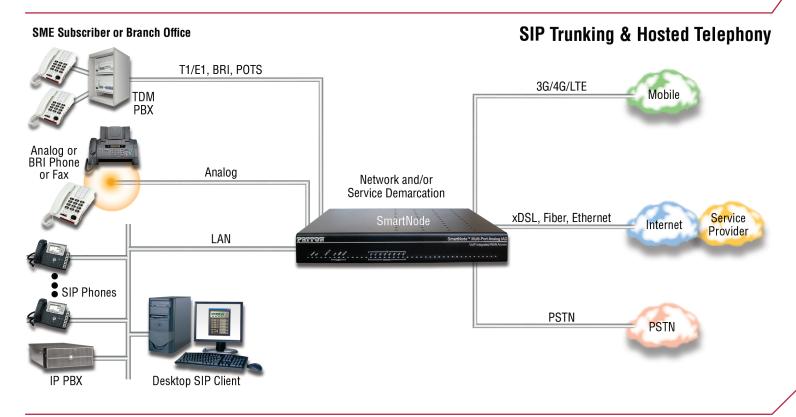
With proven lab and field-tested interoperability with BroadWorks and BroadCloud, Patton eases the migration to an all-IP network. A variety of CPE solutions delivers all IP services, regardless of the readiness, state and pace of migration of your legacy infrastructure. We deliver seamless connectivity and offer decades of experience assisting carriers with SIP and TDM interoperability.

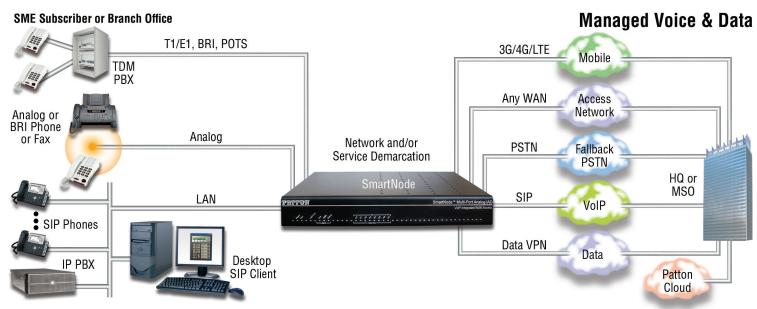
Automated provisioning, subscription management, license management, quality monitoring, device management and control are all orchestrated from the easy-to-use Patton Cloud. We deliver API connectivity of these services to CRM, OSS and BSS platforms.



Primary Use-Cases of Patton's CPE

- Hosted Telephony or SIP Trunking with Legacy Device Integration
- Hosted Telephony or SIP Trunking with On-premise PBX Integration
- Hosted Telephony with Automated Multi-WAN Balancing and Survivability
- Hosted Telephony or SIP Trunking with TDM Survivability





CPE Products & Solutions for BroadSoft

for BroadCloud

-SIP Trunking

Patton's SmartNode product, over the last 20 years, has achieved universal interoperability with the industries winning Softswitch and IMS platforms and has been functionally integrated with all major and minor brand of on-premise PBX and UC solutions. SmartNodes offer superior SIP normalization services making it the best service delivery and service demarcation device for any SIP Trunking services. Hearty voice features a wide range of supported Codec, a full Call Routing engine, Enterprise dial plan support and fully integrated eSBC functionality makes the SmartNode an unrivaled value to the Service Provider.

Delivering a wide variety of TDM interfaces, SmartNodes enable Carriers to easily transition TDM trunk subscribers to SIP's trunks, while delivering a no-touch, future proof path to All-IP. Further migrating customers from SIP Trunks to Cloud based Telephony, Cloud Data services and SDN, NFV based services means that a small investment in a Patton CPE goes a very long way.

Hosted Telephony

The SmartNode enables seamless and hassle free migration from on-premise TDM or IP PBX systems and either TDM or SIP trunks to Hosted VoIP. Legacy stations can connect and SIP phones alike can register with hosted PBX services with Patton TDM enabled eSBCs. SIP normalization, QoS, network monitoring and enhanced voice & data security features make the SmartNode a perfect Service Demarcation device for OTT services. Using our automated survivability features, end-point registrations with hosted services are monitored, enabling instantaneous failover to redundant TDM or Multi-WAN broadband links, without the need for dual-registration or any changes to the hosted service or end point device configurations. Re-direction, license services, quality monitoring and link monitoring are also available from the Patton Cloud.

Converged Voice & Data Managed Services

Providing enterprise class edge routing, switching, QoS in a single CPE device, the SmartNode is perfectly suited for MSOs adding Managed Voice services to Data Service offerings. If any MSO is delivering third party SIP Trunks or Hosted Telephony in addition to existing data services, the Patton SmartNode gives the MSO the ability to fully monitor and control both the enterprise network and the voice service demarcation. Providing a wide array of Management, Monitoring and Troubleshooting tools the SmartNode ensures MSO's can deliver high quality converged services.

Branch Office Managed Voice & Data

Large Enterprises have rapidly deployed ALL-IP voice and data services in their large HQ facilities. They have struggled to find solutions for Branch Offices with a diverse set of broadband and telephony solutions on-premise. The diversity and interoperability of the SmartNode ensures a low-cost one-box migration solution, regardless of end-points or strategy for migration of the branch offices. Supporting secure tunnels, VPN connections, local converged voice & data security (Encryption, TLS, local Firewall etc.) and VLANs the SmartNode ensures secure connections between the HQ and its branch offices. With local voice services and call routing capabilities the SmartNode can integrate with any enterprise dialing plan, even if diverse multi-vendor and multi-generation voice systems.





Value Proposition

BroadCloud & BroadWorks Certifications ————

Patton's SmartNode CPE products have been certified with BroadWorks since 2006 and are now integrated with both the Commercial and Government (Fed Ramp) incarnations of BroadCloud. Patton SmartNodes can be configured and managed via Broadsoft DMS and PacketSmart embedded-probes can be enabled on any SmartNode.

- BroadWorks
- BroadCloud commercial & government Integration
- eSBC certification

- ATA certification
- DMS certification
- PacketSmart certification

Purpose-built CPE with Cloud Orchestration—

Ideally suited for SME and Branch Office integration, SmartNodes fully address the needs of Carriers and Service Providers in terms of both Network Integration and are scalable to address the needs of key vertical markets. Touchless provisioning, self-learning configurationless survivability, full DMS (device management) integration, cloud-powered orchestration and license management are just a few of advantages of the SmartNode for Broadsoft. The Patton Cloud adds further value by delivering license management, security certificate management, remote access, device and other OA&M Service.

Advantages of Using Patton's CPE for BroadCloud:

- Rapid and fully-automated deployment of services
- "Canned" popular use-case-based modeling and BroadCloud catalog availability
- PacketSmart-based MOS and quality monitoring (on all models)
- Patton Cloud CPE orchestration and license management with easy-to-integrate APIs
- An "in-common" software platform for all devices and Patton Cloud Services
- Patton Cloud CPE and DMS management
- Highly integrated and scalable solutions
- Support for one-box CPE including integrated Access Network termination and/or Edge Router

Facilitating a Pain-Free Migration to ALL-IP-

Patton empowers service providers to migrate subscribers from legacy infrastructure to ALL-IP all-at-once or a controlled or staged pace. Any SmartNode can be just a Gateway/ATA. We offer a variety of integrated WAN interfaces, including SFP for Native Fiber Ethernet or a variety of xDSL interfaces. With the simple addition of licenses those same units can be transformed into Edge Routers, Survivability Appliances, and/or eSBCs.

Patton Unique Values:

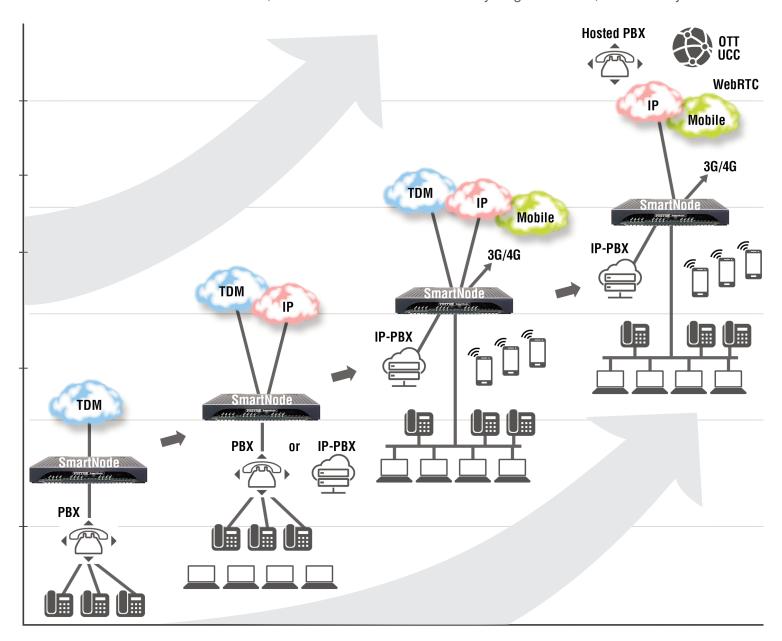
- Total TDM and SIP connectivity and interoperability
- Flexible software-licenses for a future proof ALL-IP transformation
- Automated self-learning Multi-WAN and TDM survivability
- PacketSmart probe integration and QoS monitoring
- Automated provisioning leveraging Broadsoft DMS or alternative device management
- Patton-Cloud CPE licensing, management and orchestration

ALL-IP Migration & Transformation -

The world of business communications has been evolving: migrating from TDM to IP and on-premises solution to the cloud. Mobile communications is exploding. These trends create the need for CPE devices that enable and empower this transformation. The market requires CPE that incorporate network demarcation, service termination, legacy device integration, multi-WAN, cloud-connectors, eSBC functions and virtualization (SDN/NFV), as illustrated below.

The Patton SmartNode portfolio addresses all the challenges involved in migration from TDM to All-IP—regardless of how incrementally or rapidly it is performed.

Whether you need a VoIP gateway to connect TDM-based equipment to an IP network, or a fully-managed and monitored CPE that delivers Internet-access, voice and data services and everything in between, Patton has you covered.



Value Proposition

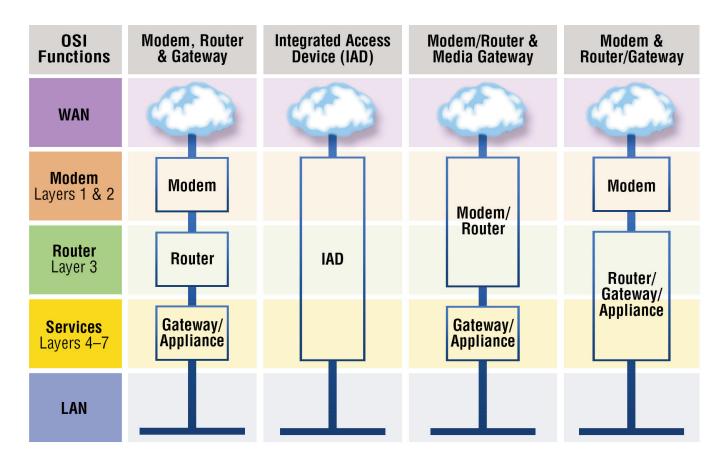
ALL-IP Migration & Transformation -

Patton's SmartNode units are available to support any level of integration or dis-integration at the customer premise. SmartNode offers cost-effective and efficient solutions for service providers that save money, reduce hardware requirements, and simplify network architecture at the customer premise. The graphic below shows a schema of the options. The "1-box solution" integrates as many functions as possible into a single device, which we call an Integrated Access Device (IAD).

As the diagram below shows, L1/2 transmission technology, L3/4 routing and security features—as well as higher layer service functions such as media gateways and signaling—are all built into the same box.

"Multi-box-solutions" divide different OSI Layer functions among separate devices. The CPE setup may easily include 4 or 5 dedicated devices for transmission, routing, firewall, bandwidth-optimization, media gateway functions and signaling. Patton's SmartNode products deliver all of these functions in a single low-cost platform. Any or all functions can be turned on or off through cloud-based licensing services.

Highly-integrated CPE come with advantages and disadvantages. Same with multi-box CPE solutions. These pros and cons can vary based on both the service provider type (access, service OTT) and based on the target subscriber market (residential, SME, enterprise).



Products for BroadSoft UC

Basic VoIP Gateways and ATAs-

Analog VolP Gateways

Patton offers a wide variety of Analog VoIP Gateways and ATAs from a low-cost single FXS port to high density analog connectivity and everything in between. Units are available with FXS ports for legacy device connectivity (phones, faxes etc.) with FXO ports for legacy trunk connectivity or both.

Model	SN200 Series	SN4140 Series	SN4740 Series
Description	Analog VoIP Gateway	Analog VoIP Gateway	IpChannelBank Analog VoIP Gateway
Telephony Ports	1/2/4 FXS or 1/2 FXS + 1 FXO	2/4/8 FXS or FXO	16/24/32 FXS or FXO
Call Capacity	1 to 4 TDM to SIP Calls	8 TDM to SIP Calls	32 TDM to SIP Calls

T1/E1/PRI VoIP Gateways

Patton's "Digital" VoIP Gateways are available with 1 to 4 T1/E1 ports and support all kinds of signaling, including Robbed Bit, R2 and ISDN (Q.Sig). Each T1/E1 port is able to face either the customer premise or trunks supporting both TDM trunk and PBX connectivity. Units support Fractional T1/E1 operation with as few as 15 SIP to TDM calls.

Model	SN4170 Series	SN4970 Series
Description	PRI VoIP Gateway	PRI VoIP Gateway 1 or 4 T1/E1/PRI interface for up to 120 simultaneous phone or fax calls
Telephony Ports	2 T1/E1	1–4 T1/E1
Call Capacity	15-30 TDM to SIP Calls	15-120 TDM to SIP Calls

BRI VolP Gateways (Including Mixed Analog & BRI)

The SmartNode BRI Gateways support a full suite of ISDN over IP use-cases and range in density from a single BRI supporting 2-calls and up to to 8 BRI's supporting 16 calls.

Model	SN4130 Series	SN4150 Series	
Description	BRI VoIP Gateway up to 8 SO ISDN ports	Analog & BRI VoIP Gateway	
Telephony Ports	2, 4 or 8 BRI/S0	2 FXS + 4 BRI or 4 FXS + 4BRI	
Call Capacity	16 TDM to SIP Calls	8 TDM to SIP Calls (12 voice channels)	





Products for BroadSoft UC

Edge Routers with Integrated TDM VoIP Gateway -

Using the same hardware as our VoIP Gateways, these devices are equipped with Edge Routing features in addition to standard analog interfaces. This is a true "business class router" supporting a full suite of Layer 3 functionality. This includes Static Routing, RIP, BGP, GRE, Dynamic DNS, DNS Relay, UPnP, Firewall, VPN and much more.

Analog VolP Routers

Model	SN5550 Series	SN4740 Series
Description	Analog + BRI, eSBC + Router	IpChannelBank Analog VoIP Router
Telephony Ports 2 FXS + 4 BRI or 4 FXS + 4BRI		16/24/32 FXS or FXO
Call Capacity	8 TDM to SIP Calls (12 voice channels)	32 TDM to SIP Calls
Automated Survivability	Multi-WAN, 3G/4G/LTE, TDM Failover	TDM Failover

T1/E1/PRI VoIP Routers

Model	SN5570 Series	SN4980 Series	
Description	T1/E1 eSBC + Router	PRI VoIP Gateway-Router	
Telephony Ports	1 T1/E1	1–4 T1/E1	
Call Capacity	15-30 TDM to SIP Calls	15-120 TDM to SIP Calls	
eSBC Session Capacity	Up to 200 Sessions	Up to 128 Sessions	
Automated Survivability	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, TDM Failover	

BRI VolP Routers

Model	SN5530 Series	SN5550 Series
Description	eSBC + Router with BRI ports	eSBC + Router with Analog & BRI ports
Telephony Ports	2, 4 or 8 BRI/S0 Ports	2 FXS + 4 BRI or 4 FXS + 4BRI
Call Capacity	16 TDM to SIP Calls	8 TDM to SIP Calls (12 voice channels)
Automated Survivability	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, 3G/4G/LTE, TDM Failover

WAN Integrated IADs -

Patton's SmartNodes are not just Gateways & Routers, they are true multi-service business routers (MSBRs) delivering "all-in-one" CPE units which marry access, data, voice and security on a single device. Using WAN Access daughter boards with independent broadband processors and both industry standard and proprietary QoS and Load Balancing techniques, the SmartNode IADs deliver superior performance, allowing end customers to maximize their broadband connections for both data and voice applications.

Analog VolP IADs

Model	SN5540 Series	SN5550 Series	
Description	Analog VoIP IAD with eSBC + Router Analog + BRI VoIP IAD, eSBC + Router		
WAN Access Options	10/100/1000 SFP, ADSL2+/VDSL2, 2/4/8 Wire Bonded G.SHDSL	10/100/1000 SFP, ADSL2+/VDSL2, 2/4/8 Wire Bonded G.SHDSL	
Telephony Ports	2/4/8 FXS or FX0	2 FXS + 4 BRI or 4 FXS + 4BRI	
Call Capacity	8 TDM to SIP Calls	8 TDM to SIP Calls (12 voice channels)	
eSBC Session Capacity	Up to 200 Sessions	Up to 200 Sessions	
Automated Survivability	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, 3G/4G/LTE, TDM Failover	

T1/E1/PRI VoIP IADs

Model	SN4990 Series	SN5570 Series	
Description	PRI Voip IAD	PRI VoIP IAD, eSBC + Router	
WAN Access Options	V.35/X.21, T1/E1, ADSL or G.SHDSL.bis	10/100/1000 SFP, ADSL2+/VDSL2, 2/4/8 Wire Bonded G.SHDSL	
Telephony Ports	1–4 T1/E1	1 T1/E1	
Call Capacity	15-120 TDM to SIP Calls	15-30 TDM to SIP Calls	
eSBC Session Capacity	Up to 128 Sessions	Up to 200 Sessions	
Automated Survivability	Multi-WAN, TDM Failover	Multi-WAN, 3G/4G/LTE, TDM Failover	

BRI VolP IADs (Including Mixed Analog & BRI)

Model	SN5530 Series	SN5550 Series	
Description	IAD with eSBC + Router with BRI ports	BRI VOIP IAD	
Access Options	10/100/1000 SFP, ADSL2+/VDSL2, 2/4/8 Wire Bonded G.SHDSL	10/100/1000 SFP, ADSL2+/VDSL2, 2/4/8 Wire Bonded G.SHDSL	
Telephony Ports 2, 4 or 8 BRI/S0 Ports		2 FXS + 4 BRI or 4 FXS + 4BRI	
Call Capacity 16 TDM to SIP Calls		8 TDM to SIP Calls (12 voice channels)	
eSBC Session Capacity Up to 200 Sessions		Up to 200 Sessionsv	
Automated Survivability	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, 3G/4G/LTE, TDM Failover	

Products for BroadSoft UC

ALL-IP Session Border Controllers (eSBCs) —

All-IP Session Border Controllers

Patton's "ALL-IP" Session Border Controllers provide seamless SIP to SIP connectivity, converged voice and data security and QoS for enterprise and service provider VoIP networks. Patton eSBCs provide either a network or demarcation point between the subscriber network and the service provider's network. Patton eSBCs deliver session control, interoperability and security for SIP interconnections. These multifunction devices also provide valuable services such as transcoding, call admission control (CAC), encryption and authentication for secure connections to the SIP trunks, as well as network topology hiding.

Model	SN5300	SN5480	SN5490
Description	eSBC + Router	eSBC + Router with Transcoding	eSBC + Router with Transcoding
eSBC Session Capacity	Up to 60 Sessions	64 SIP-SIP with transcoding and 80 SIP Sessions without transcoding	64 SIP-SIP with transcoding and 80 SIP Sessions without transcoding
Automated Survivability	Multi-WAN, 3G/4G/LTE Failover	Multi-WAN Failover	Multi-WAN, 3G/4G/LTE Failover

eSBCs with TDM Ports

In addition to the functionality discussed above, any SmartNode equipped with TDM ports can be factory shipped with SBC functions or "transformed" after deployment with the addition of an SBC license. The hybrid functionality enable service provider to deploy CPE devices capable of supporting future SIP or All-IP based services. Patton not only enables SIP to TDM, TDM or TDM or SIP to SIP functionality, the addition of integrated WAN interfaces and Edge Routing functionality is available (see IADs).

Model	SN5540	SN5550	SN5570	SN4990
Description	eSBC + Router with analog ports	eSBC + Router with Analog & BRI ports	eSBC + Router with T1/E1/PRI ports	PRI VoIP IAD with T1/E1/PRI ports
Telephony Ports	2/4/8 FXS or FXO	2 FXS + 4 BRI or 4 FXS + 4BRI	1 T1/E1	1-4 T1/E1
Call Capacity	8 TDM to SIP Calls	Up to 8 TDM to SIP Calls	15-30 TDM to SIP Calls	15-120 TDM to SIP Calls
eSBC Session Capacity	Up to 200 Sessions	Up to 200 Sessions	Up to 200 Sessions	Up to 128 Sessions
Automated Survivability	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, TDM Failover





VDSL2/ADSL2+ Converged CPE-

Patton's VDSL2/ADSL2+ Converged CPE devices represent the next-generation of "DSL modems". These units support the latest advances in VDSL2/ADSL2+ technology including vectoring and the most currently available VDSL2 profiles. Offered as a one-box demarcation for access and services, these SmartNodes deliver integrated eSBC software and/or legacy TDM telephony interfaces.

VDSL2/ADSL2+ All-IP Models

Model	SN5300 Series	SN5490 Series		
Description	VDSL2/ADSL2 VoIP IAD with eSBC + Router	VDSL2/ADSL2 VoIP IAD with eSBC + Router		
Telephony Ports	n/a	n/a		
Call Capacity	n/a	n/a		
eSBC Session Capacity	Up to 60 Sessions	64 SIP-SIP with transcoding and 80 SIP Sessions without transcoding		
Automated Survivability	Multi-WAN, 3G/4G/LTE Failover	Multi-WAN, 3G/4G/LTE Failover		

VDSL2/ADSL2+ Units With TDM Ports

Model	SN5540 Series	SN5550 Series	SN5530 Series	SN5570 Series	SN4990 Series
Description	VDSL2/ADSL2 VoIP IAD with eSBC + Router and analog ports	VDSL2/ADSL2 VoIP IAD with eSBC + Router and Analog & BRI Ports	VDSL2/ADSL2 VoIP IAD with eSBC + Router and BRI ports	VDSL2/ADSL2 PRI VoIP IAD with eSBC + Router and T1/E1/PRI ports	VDSL2/ADSL2 PRI VoIP IAD with eSBC + Router and up to 4 T1/E1/PRI ports
Telephony Ports	2/4/8 FXS or FXO	2 FXS + 4 BRI or 4 FXS + 4BRI	2, 4 or 8 BRI/S0 Ports	1 T1/E1	1–4 T1/E1
Call Capacity	8 TDM to SIP Calls	Up to 8 TDM to SIP Calls	16 TDM to SIP Calls	15-30 TDM to SIP Calls	15-120 TDM to SIP Calls
eSBC Session Capacity	Up to 200 Sessions	Up to 200 Sessions	Up to 200 Sessions	Up to 200 Sessions	Up to 128 Sessions
Automated Survivability	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, TDM Failover





Products for BroadSoft UC

G.SHDSL Converged CPE -

G.SHDSL Units With TDM Ports

Delivering symmetrical rates greater than 60 Mbps, Patton G.SHDSL CPE products give new life to copper infrastructure supporting the latest UC, SIP Trunking and other SIP converged services over DSL. These units support both EFM and ATM based wire-bonding for up to 4 wire pairs and TC-PAM modulation for distances up to 34K feet (10K meters).

	G.SHDSL Units With TDM PortsG.SHDSL Units With TDM Ports				G.SHDSL All-IP Models		
Model	SN5540 Series	SN5550 Series	SN5530 Series	SN5570 Series	SN4990 Series	SN5300 Series	SN5490 Series
Description	G.SHDSLVoIP IAD with eSBC + Router and analog ports	G.SHDSL VoIP IAD with eSBC + Router and Analog & BRI Ports	G.SHDSL VoIP IAD with eSBC + Router and BRI ports	G.SHDSL PRI VoIP IAD with eSBC + Router and T1/E1/PRI ports	G.SHDSL PRI VoIP IAD with eSBC + Router & up to 4 T1/E1/PRI ports	G.SHDSL VoIP IAD with eSBC + Router	G.SHDSL VoIP IAD with eSBC + Router
Telephony Ports	2/4/8 FXS or FXO	2 FXS + 4 BRI or 4 FXS + 4BRI	2, 4 or 8 BRI/S0 Ports	1 T1/E1	1-4 T1/E1		
Call Capacity	8 TDM to SIP Calls	Up to 8 TDM to SIP Calls	16 TDM to SIP Calls	15-30 TDM to SIP Calls	15-120 TDM to SIP Calls		
eSBC Session Capacity	Up to 200 Sessions	Up to 200 Sessions	Up to 200 Sessions	Up to 200 Sessions	Up to 128 Sessions	Up to 60 Sessions	64 SIP-SIP with transcoding & 80 SIP Sessions with- out transcoding
Automated Survivability	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, TDM Failover	Multi-WAN, 3G/4G/LTE Failover	Multi-WAN, 3G/4G/LTE Failover

Ethernet-Over-Fiber Converged CPE -

Ethernet-over-Fiber (SFP) Converged CPE

Patton's fiber IAD products all support 1 SFP WAN interface and can be equipped with a variety of SFP modules for Ethernet transport applications. These modeuls include a wide variety of single-mode, multi-mode as well as Smart SFPs with NID or MEF CE 2.0 compliance.

	Ethernet-Over-F	iber, All-IP Models	Ethernet-Over-Fiber With TDM Ports				
Model	SN5300 Series	SN5490 Series	SN5540 Series	SN5550 Series	SN5530 Series	SN5570 Series	SN4990 Series
Description	Ethernet SFP VoIP IAD with eSBC + Router	Ethernet SFP VoIP IAD with eSBC + Router	Ethernet SFP VoIP IAD with eSBC + Router and analog ports	Ethernet SFP VoIP IAD with eSBC + Router & Analog & BRI Ports	Ethernet SFP VoIP IAD with eSBC + Router and BRI ports	Ethernet SFP PRI VoIP IAD with eSBC + Router & T1/E1/PRI ports	Ethernet SFP PRI VoIP IAD with eSBC + Router & up to 4 T1/E1/PRI ports
Telephony Ports	n/a	n/a	2/4/8 FXS or FXO	2 FXS + 4 BRI or 4 FXS + 4BRI	2, 4 or 8 BRI/S0 Ports	1 T1/E1	1-4 T1/E1
Call Capacity	n/a	n/a	8 TDM to SIP Calls	Up to 8 TDM to SIP Calls	16 TDM to SIP Calls	15-30 TDM to SIP Calls	15-120 TDM to SIP Calls
eSBC Session Capacity	Up to 60 Sessions	64 SIP-SIP with transcoding and 80 SIP Sessions with- out transcoding	Up to 200 Sessions	Up to 200 Sessions	Up to 200 Sessions	Up to 200 Sessions	Up to 128 Sessions
Automated Survivability	Multi-WAN, 3G/4G/LTE Failover	Multi-WAN, 3G/4G/LTE Failover	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, 3G/4G/LTE, TDM Failover	Multi-WAN, TDM Failover

BroadSoft UC Resources

Device Interoperability Letters of Validation, Supported Capabilities Documents, and Configuration Guides can be found on the BroadSoft Partner Page.

Automated Survivability White Paper

BroadSoft BroadWorks Configuration

BroadCloud Configuration Guide

CPE Architecture: When Does All-IP Equal All-in-One?

The Gateway to BroadWorks

Patton-BroadSoft Auto-Provisioning Solution for SIP Trunks Serving Customer-Chosen IP PBX

SmartNode Integrated Access Device Product and Solutions Guide

Who Needs an Enterprise Session Border Controller?

www.patton.com/BSFT

www.patton.com

Patton Electronics Co. 7622 Rickenbacker Drive Gaithersburg, Maryland 20879 USA Phone +1 301 975 1000 Fax +1 301 869 9293 E-mail sales@patton.com Patton-Inalp Networks AG Meriedweg 7 CH-3172 Niederwangen Switzerland Phone +41 (31) 985 25 25 Fax +361 1439 4844 E-mail ce@patton.com Patton Hungary Zrt Gåbor Dénes utca 4. Infopark Building C, Budapest H-1117 Hungary Phone +361 439 4844 Fax +361 1439 4844 E-mail ce@patton.com

