SMARTLINK 4020 SERIES

The SmartLink 4020 VoIP SoHo Router connects your LAN, standard analog phones, and fax to any IP network. This full-featured IP router includes VPN/Security and Quality of Service for converged low-cost sales-office/telecommuter voice data communications.

Analog VoIP SoHo Router

SmartLink 4020

The SmartLink VoIP SoHo Router provides transparent connectivity for analog phones and faxes to the world of Internet voice. Connecting to any analog phone, fax or PBX, the SmartLink product is an effective and flexible solution for small offices and telecommuters to access Internet-based telephone services and corporate intranet systems across established LAN and Internet connections like xDSL and cable modems.

The SmartLink Model 4021 provides two RJ-45 Ethernet ports and one FXS (RJ-11) analog phone port. The SmartLink Model 4022 provides two RJ-45 Ethernet ports and two FXS (RJ-11) analog phone ports. Front panel LEDs quickly show at-a-glance the status of the system, LAN, WAN, and phone ports.

A full suite of IP features (DHCP, NAT/PAT, NTP and VPN) are available to LAN devices attached downstream. VLAN tagging and prioritization enables voice traffic to be handled before data traffic. Support for PPPoE and IPSEC tunneling simplifies extending corporate intranet services to remote teleworkers.

The web interface offers two levels of configuration access for the network operator and end user. The friendly web interface and product labeling (*Phone*, *LAN, WAN* etc.) to help ensure a trouble-free installation for the end user. Configuration and firmware can be downloaded from a TFTP server.

The SmartLink is SIP standard compliant, so it can be used with most SIP-based telephony services. Analog phones attached to the SmartLink can use such advanced voice calling features as call forwarding, caller ID, 3-way calling, call holding, call retrieval and call transfer.

For more information, visit us at www.patton.com.

Two FXS Connections

Up to 2 FXS ports connect to your standard telephone or PBX.

QoS Guaranteed Voice & Data

Quality of Service ensures voice traffic gets priority without shutting down your Ethernet LAN.

Firewall, NAT, DHCP, PPPoE

Connect to any broadband access provider, serve the whole network, and secure your data. User configurable IP services ensure every host is connected to the LAN.

IPSEC VPN, Encryption, & VLAN

Connect your telephone for IP access and secure your voice with IPSEC. Choose DES/3DES for encryption and IKE/manual key negotiation. VLAN tagging/stripping allows interfacing into your existing network today.

SIP Signaling

Deploy into any multimedia, interactive, or softswitch network with the leading call and session signaling protocols.

Toll Quality CODECs & T.38 Fax

Uses standard G.711 or G.726 CODECs for toll-quality voice, or G.723 or G.729 for low-bandwidth applications.

### SNMP Manageable

HTTP/SNMP manageable from any location.

PATTON

SmartLink 4022

✔ Easy to set up

✔ Combines voice and data over VPN

✔ Enables standard analog phones to use Internet voice services

✔ Complete router with IPSEC, PPPoE, DHCP, & NAT

✔ More than 20 calling features (including call forward, 3-way calling, and speed dial)

VoIP Integration

Using Patton's SmartLink VoIP SoHo routers with FXS supports seamless access to Internet telephony and data.
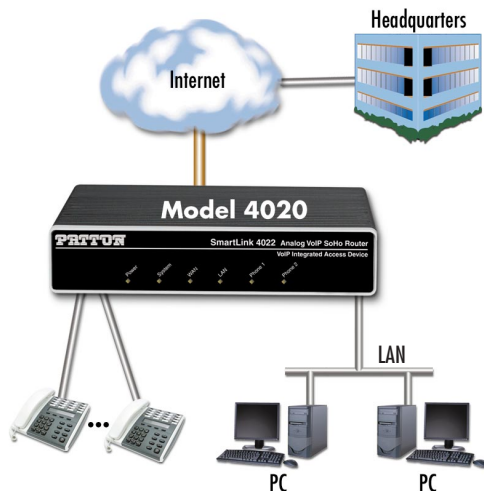
LAN/WAN QoS & Router

As a premise router, the SmartLink offers voice and complete Internet access. With dual 10/100 Ethernet ports, the SmartLink connects hosts to your LAN with VLAN tagging, DHCP server/client, and Firewall/ACL services. Use PPPoE and IPSEC VPN with DES, 3DES, and AES encryption and bring your voice and data to the WAN through a single and secure network connection.
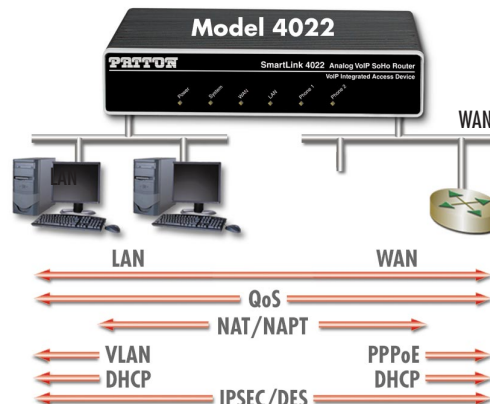
Specifications

Voice Connectivity
- 2-wire Loopstart, RJ-11/12
- Short haul loop 1.1 km @3REN
- Caller-ID Type-1/2 FSK and ITU V.23/Bell 202 generation

Connectivity
- 2 10/100 Full Duplex/Autosensing Ethernet RJ-45

Voice Processing (signalling dependent)
- SIP
- MGCP
  - Packet Cable NCS 1.0
  - IETF MGCP 1.0
- Voice codes
  - G.711 A-Law/μ-Law (64 kbps)
  - G.726 (ADPCM 40, 32, 24, 16 kbps)
  - G.723.1 (5.3 or 6.3 kbps)
  - G.729ab (8 kbps)
- G.168 echo cancellation
- 4 parallel voice connections
- DTMF detection and generation
- Carrier tone detection and generation

- Silence suppression and comfort noise
- Configurable dejitter buffer
- DTFM in-band & out-of-band
- Configurable transmit packet length
- RTP/RTCP (RFC 1889)
- STUN

Fax and Modem Support
- G.711 transparent FAX
- T.38 Fax relay (9.6 k, 14.4 k)

Voice Services/Features
- Anonymous CallerID block
- Call blocking
- Call forward — on busy
- Call forward — selective
- Call forward — unconditional
- Call hold/retrieve
- Call return
- Call transfer — blind
- Call transfer — with consultation
- Call waiting/retrieval
- Caller-ID
- Conference drop

- Conferencing (3-way calling)
- Distinctive ring
- Do not disturb
- Hotline calling
- Incoming CallerID on/off
- IP URL dialing
- Message waiting indication
- Self-caller ID block
- Speed dial
- Voicemail message retrieval
- Warmline calling

IP Services
- IPv4 router; RIPv1, v2 (RFC 1058 and 2453)
- IP filtering
- NAPT
- NTP
- DMZ
- DHCP client & server
- PPPoE
- IPSEC VPN
- Programmable static routes
- ICMP redirect (RFC 792); Packet fragmentation

- DiffServe/ToS set or queue per header bits
- VLAN support 802.1p/q
- AES/DES/3DES Encryption

Management
- Browser configuration interface
- Multilevel security access
- TFTP & HTTP configuration & firmware loading
- SNMP v2 agent (MIB II and private MIB)
- Syslog support

Operating Environment
- Operating temperature: 0–40°C (32–104°F)
- Operating humidity: 5–80% (non condensing)

System
- Power: 100–240 VAC (50/60 Hz)

Compliance
- EMC compliance: EN55022 and EN55024
- Safety compliance: EN 50950
- CE compliance
- FCC Part 15 Class B

Model Information

SL4021/EUI/S 1 Port FXS VoIP Gateway Router, 100–240VAC external PS, SIP.
SL4021/EUI/M 1 Port FXS VoIP Gateway Router, 100–240VAC external PS, MGCP.

SL4022/EUI/S 2 Port FXS VoIP Gateway Router, 100–240VAC external PS, SIP
SL4022/EUI/M 2 Port FXS VoIP Gateway Router, 100–240VAC external PS, MGCP

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