Polycom® SoundStructure®
Telephony Interfaces

SoundStructure Telephony Plug-in Cards Provide Flexible, Best-in-Class Unified Communications

The three configurable telephony interfaces cards for Polycom® SoundStructure® installed audio solutions provide flexibility and investment protection for traditional PSTN and emerging IP telephony environments. These telephony interfaces expand SoundStructure solutions through the addition of remote telephony participants to audio and video conferencing applications. The SoundStructure telephony plug-in cards are compatible with SoundStructure C16, C12, C8, and SR12 devices.

Polycom SoundStructure VoIP Interface
The Polycom SoundStructure VoIP Interface provides superior SIP-based Voice over IP (VoIP) capabilities in a modular plug-in card form factor.

Native SIP Integration with Unified Communication Environments
The Polycom SoundStructure VoIP Interface natively integrates with SIP call platforms and unified communications (UC) environments supporting a broad range of telephony features including dialing, hold, resume, transfer, do not disturb, and conference. The SoundStructure VoIP Interface supports both narrow-band and wideband Polycom HD Voice™ audio capabilities.

Easy Upgrade to VoIP
The Polycom SoundStructure VoIP Interface is easily integrated into your call platform environment and is a simple upgrade from existing PSTN solutions. SoundStructure Studio software streamlines creating new designs and upgrading existing PSTN-based designs to VoIP-based environments. With a common application programming interface, existing PSTN solutions can be upgraded to VoIP without reprogramming existing third-party control systems.

Best-In-Class Deployment and Administration
The SoundStructure VoIP Interface is easy to deploy and manage in a VoIP environment. Intuitive, Web-based configuration software gives administrators the ability to provision and maintain large numbers of SoundStructure VoIP interfaces and Polycom SoundPoint® IP desktop phones.

Market-Leading, Open-Standards Interoperability
Designed for enhanced interoperability, and leveraging and complementing existing IT investments of any enterprise, the SoundStructure VoIP Interface delivers HD Voice and a superior Unified Communications experience.

Benefits of VOIP Interface
- Easy to integrate directly into SIP call management platforms and unified communications applications
- Easy to control through backwards-compatible API
- Easy to provision, administer, and maintain, minimizing administration expenses
- Easy to upgrade from SoundStructure TEL1 and TEL2 systems to VoIP solutions
- Leverages existing IT infrastructure investments
Polycom SoundStructure TEL1 and TEL2 Interfaces
For installed audio room environments that require analog PSTN telephony connections, the Polycom SoundStructure TEL1 and TEL2 plug-in cards expand the functionality of SoundStructure solutions to include remote participants via traditional PSTN lines.

The SoundStructure TEL1 interface supports connection to a single PSTN line and an optional handset. The handset connection can be used to provide a privacy option during a conference. The SoundStructure TEL2 interface supports connections to two independent PSTN lines for conferencing two remote participants simultaneously.

### Polycom SoundStructure Telephony Interfaces Specifications

#### SoundStructure VoIP Interface

**Audio Features**
- Polycom HD Voice™ technology delivers life-like voice quality
- Frequency response – 100 Hz – 20 kHz
- Voice activity detection
- Comfort noise generation
- DTMF tone generation (RFC 2833 and in-band)
- Low-delay audio packet transmission
- Adaptive jitter buffers
- Packet loss concealment

**Call Handling Features**
- 12 lines (registrations)
- 24 call appearances (remote calls)
- Distinctive incoming call treatment/call waiting
- Call transfer, hold, resume (forward), pickup
- Local three-way audio conferencing
- Do not disturb function

**Network and Provisioning**
- SIP Protocol Support
- SDP
- IETF SIP (RFC 3261 and companion RFCs)
- One 10/100/1000 Mbps LAN interface
- Conforms to IEEE802.3-2005 (Clause 40) for Physical Media Attachment
- Conforms to IEEE802.3-2002 (Clause 28) for Link Partner Auto-Negotiation
- Manual or dynamic host configuration protocol (DHCP) network setup
- Time and date synchronization using SNTP
- FTP/TFTP/HTTP/HTTPS server-based central provisioning for mass deployments
- Provisioning and call server redundancy supported
- QoS Support – IEEE 802.1p/Q tagging (VLAN), Layer 3 TOS, and DSCP
- Network Address Translation (NAT) – support for static configuration and “Keep-Alive” SIP signaling
- RTCP and RTP support
- Event logging
- Syslog
- Local configurable digit map/dial plan
- IPv4
- TCP
- UDP
- DNS-SRV

**Security**
- Media encryption via SRTP
- Transport Layer Security (TLS)
- Encrypted configuration files
- Digest authentication
- Password login
- Support for URL syntax with password for boot server address
- HTTPS secure provisioning
- Support for signed software executables

**Approvals**
- FCC Part 15 (CFR 47) Class A
- ICES-003 Class A
- EN55022 Class A
- CISPR22 Class A
- AS/NZS CISPR 22 Class A
- VCCI Class A
- EN55024
- EN61000-3-2; EN61000-3-3
- NZ Telepermit
- ROHS compliant

**Safety**
- UL 60950-1
- CE Mark
- CAN/CSA-C22.2 No. 60950-1-03
- EN 60950-1
- IEC 60950-1
- AS/NZS 60950-1

#### SoundStructure TEL1 and TEL2 Interface

**Audio Features**
- Frequency response: 250-3300 Hz
- Input gain: -100 to +20 dB in 1 dB steps, software adjustable
- Nominal transmit level: 0 dBu in SoundStructure yields -15 to -17 dBm to phone (country code dependent)
- Nominal receive level: -15 to -17 dBm from phone yields 0 dBu output (country code dependent)
- Off hook loop current: 10 mA (minimum) to 120 mA (maximum)
- Output gain: -100 to +20 dB in 1 dB steps, software adjustable
- Dynamic range: >70 dB FS, 250-3300 Hz, “A” weighted
Polycom SoundStructure Telephony Interfaces Specifications

Polycom SoundStructure TEL1 and TEL2 interfaces come with:
- SoundStructure TEL1 or TEL2 plugin card
- Phone cable (Two phone cables with TEL2)
- Hardware Installation Manual

SoundStructure Plug-in Cards

Operating Conditions
- Temperature: +32 to 104°F (0 to 40°C)
- Relative Humidity: 5% to 95%, non-condensing

Storage Temperature
- -40 to +160°F (-40 to +70°C)

Size
- 4 x 1 x 8.5 in (10 x 3 x 22 cm) (W x H x D)

Weight
- Unit weight: 2.0 lbs (0.9 kg)
- Unit Box Dimensions / Weight
  - 14 x 3.5 x 7.5 in (36 x 9 x 19 cm) (W x H x D)
  - 3.1 lbs (1.4 kg)
- Country of Origin
- Thailand
- Warranty
- One (1) year

1 Most software-enabled features and capabilities must be supported by the server. Please contact your IP PBX/Softswitch vendor or service provider for a list of supported features.

About Polycom

Polycom is the global leader in standards-based unified communications (UC) solutions for telepresence, video, and voice powered by the Polycom® RealPresence® Platform. The RealPresence Platform interoperates with the broadest range of business, mobile, and social applications and devices. More than 400,000 organizations trust Polycom solutions to collaborate and meet face-to-face from any location for more productive and effective engagement with colleagues, partners, customers, specialists, and prospects. Polycom, together with its broad partner ecosystem, provides customers with the best TCO, scalability, and security for video collaboration, whether on-premises, hosted, or cloud-delivered. Visit www.polycom.com or connect with Polycom on Twitter, Facebook, and LinkedIn.

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