

# SPC500

## Signalling Conversion

The Synia protocol converter provides full interworking between different signalling protocol variants to enable seamless interconnect between equipment of varying signalling standards.



### Overview

The SPC Signalling Converters represent a scalable range of Protocol Signalling & Media Conversion devices for inter-working SS7 between disparate networks/nodes such as H323/Q-Sig/R2/DPNSS or ISDN.

The system may comprise of a single box solution that includes signalling & voice or a multi chassis solution connected via TCP/IP supporting Signalling and Media Gateway functionality.

The highly scalably distributed architecture may support a maximum of 112 SS7 Signalling Links and up to 256 E1/T1 Ports per SS7 Interconnect.

SPC500 is based around a 9u high cPCI chassis with hotswap Signalling/Media Interface boards and hotswap PSU and Cooling Tray.

The range of Signalling Converters are part of Synia's complete solutions set of SS7 Inter-working and SMS/MMS Service Creation devices.

[www.synia.net](http://www.synia.net)

### Applications

Inter-working between different SS7 networks (including inter-working between mixed ITU-T, ANSI, China and Japan MTP protocols).

Protocol conversion between different SS7 telephony user parts (including ITU-T, ETSI, ANSI, China, UK and France variants).

SS7 Interconnects for IP Telephony systems

Interconnecting peripheral equipment, such as a PBX, to an SS7 network (using ISDN, QSIG or DPNSS).

SS7 Interconnect to an H.323 Gatekeeper

### Features & Benefits

#### Scalability

- Up to 112 SS7 Signalling Links
- Distributed 256 Port (E1/T1) per SS7 Interconnect
- Up to 96 E1/T1 Per Chassis
- Multi Chassis Support
- STM-1 Support

#### Multiple Protocol Support

- SS7 ISUP/NUP/TUP
- ISDN/Q-SIG
- V5.X
- CAS/R2
- H.323

#### Bearer Translation

- Mu law to A law Conversion
- Data Rate Adaption (V.110)
- Switched to Packet (Voice and Data)

#### OA&M

- Remote LAN/WAN
- Simple ASCII file configuration

## Expanded capabilities

For existing systems that utilize an existing access protocol or a single SS7 variant, new markets may be addressed with the SPC systems allowing proven inter-working with other SS7 variants or acting as a point to interconnect to a non SS7 enabled piece of equipment but already supports H323 or ISDN based protocol.

The SPC Signalling Converters provide instant compatibility with a wide range of networks and signalling types through simple configuration. The SPC systems are ideal for interconnects, as these widely deployed units can be placed for approval independently of the rest of the solution.

A unique feature of the SPC range is scalability; a two port ISDN E1 system can easily grow to a 256 -port ISDN E1 system using a STM1 SS7 point of interconnect.

## SS7 Signalling Capabilities

Connect directly to up to 10 adjacent switches.

Connect indirectly (via Signalling Transfer Points) to up to a total of 100 switches.

Support for combined link sets.

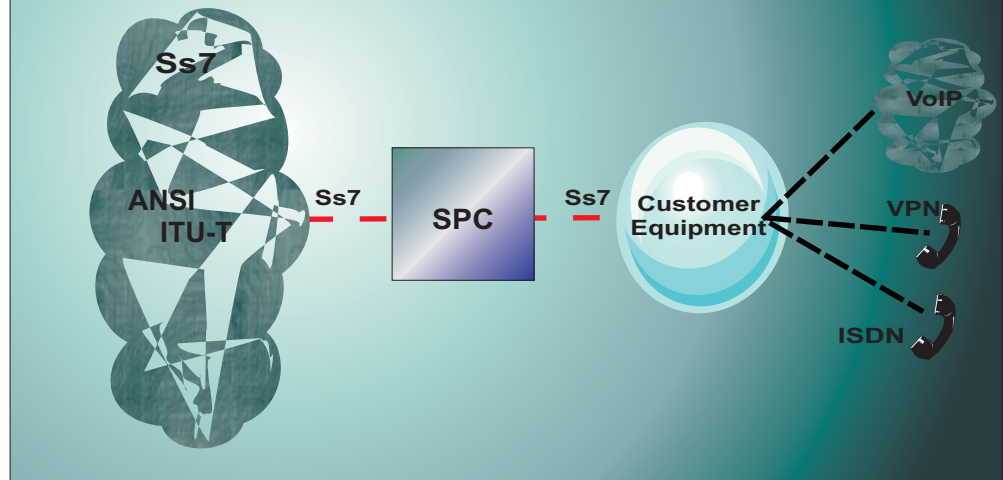
Simultaneous use of ANSI, ITU-T and China No 7 Message Transfer Parts (MTP).

Fully flexible mixing between 14, 16 and 24 bit point code sizes.

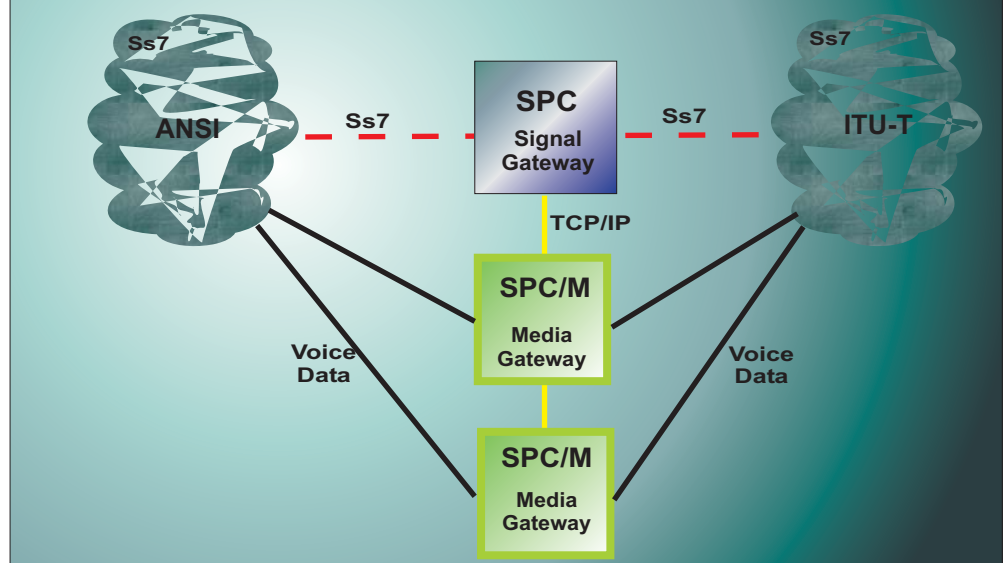
Configurable data rate (48, 56 or 64 kbit/s) and error correction mode (Basic or PCR).

Support for multiple User Parts (ISUP, TUP, UK-NUP, China) at the same time

## Point of Interconnect to an Ss7 Network



## Protocol Conversion between SS7 variants



## PBX/Gatekeeper to an Ss7 Network

