CSP ecosystem is a telecommunication solutions designed to provide professional users with integrated network and services across heterogeneous technologies and to bring in professional broadband environment the same level of functionalities, services and reliability supplied by narrowband technologies.

The **Gateway (CSP-GW)** provides gateway services to the CSP subscribers connecting the CSP platform with external networks in order to satisfy the increasing need for integration of different communication technologies especially during mission-critical operations.

The CSP-GW implements signalling and media gateway functions between the CSP-CM and external networks (PSTN/PLMN and PABXs) exposing interfaces such as:

- ISDN-PRI
- 2 wires FXO (Foreign eXchange Office)
- 4 wires E&M (Ear and Mouth)
- Trunking SIP

**MAIN FEATURES**

The CSP-GW can be used in different telephone or data network environments. It provides gateway services between the CSP network and the following telephone network technologies:

- VoIP networks (SIP)
- ISDN networks
- Analog telephone networks via 2 Wire FXO or 4 Wire E&M or Legacy Analog Radio Networks via 4W E&M.

The CSP-GW provides ACELP, G.711 A-law and U-law codecs.

**CAPABILITIES**

Main services available (some upon request) are:

- L3 Routing
  - OSPF v2
  - BGP v4
  - RIP v1, RIP v2
- IP Security
  - ACL
  - NAT
- Interfaces
  - 2 port ISDN-PRI
  - 4 port 2wires FXO (Foreign eXchange Office)
  - 8 port 4wires E&M (Ear and Mouth)
  - 4 port Gigabit Ethernet
- VoIP services
  - SIP
- Redundancy
  - Link Bonding
- Management
  - SNMP
- Configuration files.
### TECHNICAL DATA

#### GENERAL
- **Dimensions (HxWxD):** 88 mm (2U) x 483 mm (standard 19" rack) x 450 mm (3.46x19.02x17.72 in)
- **Weight:** About 10 kg (fully equipped) [22.05 lb]
- **Cooling system:** Air forced cooling system front to rear
- **Power input:**
  - 90-264 VAC, 50-60 Hz
  - -48 VDC (-36 to -72 VDC range)
- **Power consumption:** Max. 160 W (fully equipped)
- **SBC Processor Unit:**
  - SBC full size over PCI -X - FSB 1333/1066 MH
  - Intel Quad Core Xeon, with 2,33 GHz clock each and 12 MB cache
  - Dual GigaBit Ethernet Intel 82575
  - 2 x USB 2.0 port
- **Backplane:** PICMG 1.3 passive backplane
  - 4 slot x PCI-X 64bit@100MHz (6.4Gbit)
- **RS 232:**
  - 2x serial port RS-232
- **LAN4 GigaBitEth:**
  - Intel QUAD LAN 10/100/1000 BASE-T

#### ENVIRONMENTAL CONDITIONS
- **Storage:** Compliant to ETSI ETS 300 019-1-1 class 1.2 standard
- **Transportation:** Compliant to ETSI ETS 300 019-1-2 class 2.2 standard
- **Operation:** Compliant to ETSI ETS 300 019-1-3 class 3.1 standard (+5° to +40°C) [41°F to 104°F], (5% to 85% relative humidity)
- **Protection degree:** IP 20
- **EC marking:** CSP is compliant to the essential requirements of the directives 2014/30/EU, 2014/35/EU and 2011/65/EU
- **EMC:** Compliant to CENELEC EN 55022 and CENELEC EN 55024 standard. Emission limits class A.
- **Safety:** Compliant to CENELEC EN 60950-1 standard.

#### PERFORMANCES
- **VoIP configuration**
  - Supporting up to 32 simultaneous VoIP calls via SIP protocol
- **4 wires E&M configuration**
  - Supporting up to 32 simultaneous calls distributed over 4 wires and SIP protocol
- **SDN-PR1/Q.SIG+ configuration**
  - Supporting up to 32 simultaneous calls distributed among EURO ISDN-RI, Q.SIG+ and VoIP SIP protocol
- **FXO configuration**
  - Supporting up to 32 simultaneous calls distributed among FXO and VoIP SIP protocol
- **ISDN-PRI double configuration**
  - Supporting up to 60 simultaneous calls distributed among EURO ISDN-PRI, Q.SIG+ and VoIP SIP protocol

---

(1) CSP-GW low-end is able to provide up to 16 GW calls independently from the HW configuration
(2) CSP-GW high-end is able to provide up to 60 GW calls independently from the HW configuration.