

## JanusOne



JanusOne is an application-integrated VoIP gateway switch. It provides an ideal solution for service providers who are looking for changing a TDM network to an IP network. With native support for all PSTN protocols and SIP, JanusOne minimizes provisioning and management work. JanusOne's small footprint saves operation costs and training time for multi-pop applications for large-scale service providers. Service providers can utilize other carriers' lower-cost VoIP termination for their telephony services. Similar type service providers can provide enhanced IP originating services to other providers to maximize the utilization of the existing TDM network with integrated applications features.

### Robust Signaling Support

JanusOne supports most worldwide TDM protocols. Native supported protocols include many variants of SS7/C7, ISDN PRI, and CAS. All trunks can support ISDN PRI. No additional components are required to support SS7/C7. SIP protocol supports eliminate interoperability issues with other carriers.

### Ease-of-use Management

Service providers can choose a centralized routing server configuration or a distributed routing server configuration as needed. Either configuration provides centralized route management with the most flexible routing scheme. JBS provides every necessary tool for service providers.

### Flexible Scale

- Flexible Scale per board. Choices of 4-64 T1/E1/J1 or 1/2/3 DS3 TDM interface.
- Scales from 4T1/E1/J1 to 1024 T1/E1/J1s or 48 DS3s with non-blocking TDM backbone.
- Up to 2048 VoIP calls per board depends on codec type
- Native SS7 support – optional software license

### Integrated Applications

- Prepaid/Postpaid Service
- International calling cards
- Carrier Wholesale
- 1+ Long Distance
- Enhance IP originating
- IP Termination

### Solution Features

- Prepaid/Postpaid Calling Card Service
- Multi-brand Greeting support
- Concurrent Multi-language support
- Fraud Prevention/Control
- ANI authentication
- Real-time rating
- Least Cost Routing
- Web-based administration

## Technical Specifications

### Standard AC Platform

- 2U - 19inch rack-mount, 300mm (11.811in.) deep with rack-mount brackets (can be set back approx. 100mm - 4in.)
- 3 slots for VoIP board or TDM only board
- H.110 bus

### VoIP Integrated Board

- Choice of 4/8/16/32/64 T1/E1/J1 interface
- Choice of 0/128/ 256/384/512/640/768 VoIP Channels
- Up to 2048 IVR supports

### TDM Line Interface

- T1/E1/J1
- DS3 (Up to 3 per board)
- OC3/STM-1
- Supports SF, ESF, SLC96 at T1/J1 mode
- Supports Double-frame (NO-CRC), CRC Multi-frame, Auto Detection at E1 mode
- B8ZS, AMI T1/J1 Line coding
- HDB3, AMI E1 Line coding
- Local /Remote Loop-back
- T1/J1 100 Ohms termination
- E1 120 Ohms termination

### SS7/C7

- Up to 30,000 CIC per blade
- N+1 redundancy with built-in stack
- 1000 ISUP calls per second
- Dynamic configuration
- Up to 16 links per E1/T1
- Up to 64 links per blade
- 56Kbps and 64Kbps links
- 'A' Link and 'F' Link Supports

### MTP3

- Up to 64 OPC per blade
- Up to 64 linksets per blade
- Point code sharing by multiple boards with distributed architecture
- Supported variants - ANSI (used for ANSI88 and ANSI92). ANSI96 (used for ANSI96 and TELCORDIA) ITU (used for ITU88, ITU92, ITU97, Q767, Singapore and ETSI) China, GF001-9001

### SS7-ISUP

- ANSI 95, ANSI 92, ANSI 88 (T1.113)
- Telcordia 97
- ITU 97, ITU 92 (Q.761), ETSI
- Singapore, China
- Complies with Q.780, Q.781, Q.782, Q.784
- Q.699 for Interworking between ISDN

### CAS

- R1- FG-B, FG-D, E&M Wink Start
- R2- Korea, China, Singapore
- Taiwan Modified R1

### VoIP

- SIPv2
- G.729ab, G.729eg, G.723.1, G.728, G.726, G.711, AMR, EVRC, SMV, QCELP
- T.38 fax over IP
- DTMF relay over IP (RFC2833)
- 128ms echo tail per channel
- Adaptive Jitter Buffer
- AGC, VAD, CNG
- Dual redundant gigabit Ethernet

### SIP Specification

- RFC 3261: Session Initiation Protocol
- RFC 3262: Reliability of Provisional Responses in SIP
- RFC 3263: SIP: Locating SIP Servers
- RFC 3264: An Offer Answer Model with Session Description
- RFC 3265: SIP - Specific Event Notification

### IVR

- Dynamic DSP allocation
- A-law to U-law conversion on all channels
- Playback and recording
- Tone detection, generation, and suppression

### Switch Platform Environmental requirements

- Power: AC or Dual -48 VDC
- Power Consumption: 60W per board without VoIP option
- Operation temperature: 0C to +50C
- Operation Humidity: 5% to 85% non-condensed

### Safety

- US: UL60950 (2000)
- Europe: EN 60950 (2000)
- International: IEC60950 (1999)

### EMC

- FCC 47 CFR Part 15, Subpart B: 1999 (Class A)
- EN55022: 1998 for Class A
- EN55024: 1998