

# SIEMENS

## InterXpress™ 1000



Companies increasingly look to service providers to manage the complexities of networking and absorb the short depreciation periods on equipment. As the cornerstone of Siemens' IP Telephony Access solution, the InterXpress 1000 Interworking Unit (IWU) allows users to cost-effectively communicate via voice and fax using an IP network as the transport medium. The InterXpress 1000 is a fully featured low cost access device based on an open hardware platform that mediates traffic between the Public Switched Telephone Network (PSTN) and IP-based networks to deliver the following services:

- IP-device to IP-device (e.g., PC to PC)
- IP-device to PSTN voice device (e.g., PC to Phone)
- PSTN voice device to IP device (e.g., Phone to PC)
- PSTN voice device to PSTN voice device (e.g., Phone to phone)
- IP device to PSTN fax device
- PSTN fax device to PSTN fax device

Typical PSTN terminals are wireline/wireless telephones, PBXs, cellular phones and fax machines. On the IP network the most common equipment are PCs, but IP phones, Network Computers and Web TV are also emerging as viable access devices to PSTN/IP interworking services.

### Customer Benefits

- IP Telephony for smaller residential areas and managed services for corporations
- Tailored for end office and customer premise
- Extensive software interfaces (APIs) to enable billing and subscriber management customization
- Value-added services, e.g., IP-based Call Centers/Automatic Call Distribution
- Comprehensive traffic management that extends into the customer network
- Scalable platform
- Operates with minimal service interruptions
- Modular
- Year 2000 compliant

### Feature overview

- Supports IP voice and fax services
- Stores and plays voice prompts for the purpose of facilitating a useful audio user interface for telephone callers
- Supports international dialing plans
- Directs the call to the correct person/department for handling
- Provides value-added services including authentication/authorization and billing
- Generates call records at the end of every call

- Supports several subscriber-billing models including post-processing, pre-paid card models, and flat rate
- Supports various intercept options such as automatic charge card authorization, automatic e-mail messages, and automatic updating
- Provides transmission of all critical information over the IP network via secure connections to prevent problems such as data interception playback, decoding, and modification by third parties
- Requires access to the service with the entry of an account number and password or PIN
- Eliminates the need to reconfigure existing gateways when new gateways are added with Dynamic Routing
- Monitors the system and provides real-time statistics such as call types, start and end times, and call duration
- Monitors the status of its hardware components and current users

# Technical Data

## InterXpress 1000

### System Hardware

#### System Configuration

Desktop or 19" Rack-mounted

#### System Expansion

24-96 ports for T1 systems  
30-120 ports for E1 systems

#### Server Unit Microprocessor

One 200 MHz Pentium Pro™ processor

#### DSP Configuration

1-4 DSP cards, processing 24/30  
ports/calls per card

### External Interfaces

#### PSTN Interfaces

T1/E1 ISDN:

AT&T TR41459  
ISDN ITU-T Q.921  
ISDN ITU-T Q.931/I.451

T1:

Metallic interface per ANSI T1.403  
CSU to T1 per AT&T Pub 62411  
PRI per ANSI T1.408  
D4 or ESF frame formats

E1:

Metallic interface per ITU-T G.703  
PRI interface per ETS 300 011  
HDB3 Line Coding  
ITU-T G.704 Framing with and  
without CRC-4

#### LAN Interfaces

Connectivity: 10 Mbps Ethernet

Transport Protocols:

Prepared for RTP/RTCP  
TCP  
UDP  
IP

Control Protocol:

Proprietary secure protocol prepared  
for H.323, H.323+

Voice features:

GSM, TrueSpeech™  
Prepared for G.711, G.723.1, G.729a  
Ability to plug-in other codecs  
Echo cancellation according to G.165  
Silence suppression  
DTMF carriage  
Dynamic and static jitter buffer

### Specifications

#### Power - AC PSU

**300W Output – Standard\***  
104-250 VAC, 47-63Hz,  
Switch Selectable

#### Power - DC PSU

**350W Output – Option\***  
48VDC Input

\*FCC Part 15, Class B

UL Recognized Component  
CE Compliance 73/23/EEC, EMC  
89/336/EEC

#### Dimensions (W x H x D)

17" x 10.5" x 17"  
432 x 267 x 432mm  
19" (483mm) wide at the Front Panel

#### Weight

47 lbs./21.7kg

#### Operating Environment

Temperature: 46° - 98°F (10° - 50°C)  
Humidity: 8 to 90% RHNC  
Altitude: 25,000 ft (7,695m)  
Shock: 10g, 3 axis  
Vibration: 1.5g, 3 axis

#### Performance

Throughput: 30,000 packets/second



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