



Increase employee productivity and customer satisfaction by unifying communications across multiple enterprise locations.

Highly reliable, intelligent ShoreGear voice switches meet the communications needs of small, medium and large offices by:

- Eliminating communication boundaries with one enterprise phone system that spans multiple locations
- Instilling confidence through a proven, dependable design
- Providing a smooth, scaleable migration to IP telephony
- Allowing rapid plug-and-play deployment
- Delivering pristine voice quality

ShoreGear-120/24

ShoreGear-60/12

ShoreGear-40/8

ShoreGear-T1

ShoreGear-E1

Eliminate communication boundaries

With a single phone system spanning multiple locations, enterprises can radically simplify employee communication and boost customer satisfaction. Enterprises can uncover hidden productivity drains as employees use four-digit dialing to reach coworkers and seamlessly transfer, conference, pick up, park and intercom between sites. Workers can even move locations and assign their extensions to any internal or external telephone with the Office Anywhere™ feature. Customer satisfaction increases as calling parties connect with the right people faster.

Confidence through reliability

System administrators can rest easy knowing ShoreGear voice switches deliver 99.999% reliability and use an embedded, real-time operating system. A unique call control architecture enables switches to communicate with each other and distribute call processing on the network. If a switch goes offline, its peers automatically compensate, ensuring uninterrupted service. Distributed call processing eliminates single-point failures – providing a level of reliability exceeding traditional voice systems.

Key Products

The ideal solution for a headquarters, regional and branch offices, **ShoreGear-120/24**, **ShoreGear-60/12** and **ShoreGear-40/8** support up to 120, 60 and 40 IP phones or 24, 12 and 8 analog devices respectively.

The switches provide an audio input port for music-on-hold, plus an audio output port for overhead paging and night bell services. A power-fail transfer port ensures dial tone during power outages.

ShoreGear-T1 provides a T1 interface for high-density trunking to a central office (CO). ShoreGear-T1 supports loop start, wink start or Primary Rate Interface (PRI) signaling. ShoreGear-T1 can also function as a voice-over-IP gateway to PBX installations – bridging the ShoreTel system to pre-existing legacy systems and smoothing the migration path to IP telephony.

ShoreGear-E1 provides an E1 interface using Euro-ISDN PRI signaling for international applications. All the ShoreGear switches include two LAN ports for redundant network connections.

Key Features

Embedded call control

ShoreGear voice switches are highly reliable devices since they use flash memory for storing information rather than a mechanical hard disk prone to failure. And since the switches use VxWorks, the leading embedded, real-time operating system from Wind River® Systems, your phone system will not be subject to the numerous attacks and viruses associated with server-based solutions. With embedded call control, you have confidence since dial tone is being delivered by the most reliable, robust platform on the market.

Smooth migration path, seamless scale

With five stackable, space-efficient designs, ShoreTel makes it easy to choose the right solution for large corporate headquarters, regional branches and small satellite offices. When the organization grows, simply add more ShoreGear voice switches - there are no costly hardware breakpoints. Enterprises can also migrate to IP telephony over time using the ShoreGear-T1 and ShoreGear-E1 to provide tandem trunking and coordinated dialing with existing PBXs.

Rapid deployment

Plug-and-play installation means enterprises can add new ports and users by simply connecting switches to the network. ShoreWare® Director automatically discovers new switches and adds them to the ShoreTel system.

Pristine voice quality

In independent rankings, ShoreTel consistently earns top marks for superior IP telephony call quality. The low latency and toll-quality voice delivered by ShoreGear switches are the result of ShoreTel technology leadership in dynamic echo cancellation and jitter buffering, as well as lost packet handling.

Distributed call control

Call control on the ShoreTel system is distributed to each and every ShoreGear voice switch on the network, eliminating any single point of failure. In the unlikely event a ShoreGear voice switch fails or becomes isolated by a network fault, the other switches on the network continue to operate without being affected.

IP phone failover

If a ShoreGear voice switch supporting IP phones fails or is isolated by a network fault, the phones will automatically failover to another voice switch at the site providing complete redundancy. And since call control is distributed, redundancy is delivered cost-effectively with N+1 rather than Nx2 configuration required by centralized systems. Second-, third-, fourth- level redundancy can be configured by simply adding additional voice switches.

Gateway failover

If a ShoreGear voice switch connected to the PSTN fails or is isolated by a network fault, the system will automatically route calls out an alternative switch.

PSTN failover

If the wide area network is down, or if admission control for voice traffic on the wide area network is reached, extension to extension calls between sites can automatically route over the PSTN ensuring seamless communication.

Ethernet port failover

ShoreGear voice switches feature redundant network uplinks. If the upstream network device fails, the ShoreGear voice switch will automatically failover to the redundant link ensuring continuous operation.

Power failover

The ShoreGear-120/24, 60/12 and 40/8 all feature power fail transfer. In the event of a complete power outage that exceeds the duration of your reserve power, one analog trunk on the voice switch will automatically connect to one analog telephone providing emergency dial tone.

Feature List

Telephone Features

Call barge in
 Call conference (6-party)
 Call forward, busy
 Call forward, external
 Call forward, no answer
 Call hold
 Call join
 Call park/unpark
 Call pickup
 Call recording
 Call stack (1-16 calls)
 Call redirect
 Call transfer, blind
 Call transfer, consultative
 Call transfer, intercom
 Call transfer, mailbox
 Call waiting
 Caller ID name
 Caller ID number
 Caller ID blocking
 Directory dialing
 Distinctive dial tone

Distinctive ringing
 E911
 Group paging
 Handsfree
 Hot key pad
 InstaDial
 Intercom
 Night bell
 Message waiting
 Missed call
 Multiple line appearance
 Music-on-hold
 Operator ("0")
 On hold reminder ring
 Office Anywhere
 Outbound caller ID
 Paging
 Redial
 Ring tone selection
 Speed dial
 Silent monitoring
 Voice mail ("#")
 Whisper page

Trunk types

Analog loop start
 Analog wink start
 T1 loop start
 T1 wink start
 T1 PRI
 • NI2
 • 4ESS
 • 5ESS
 • DMS 100
 • QSIG
 E1 PRI
 • EURO-ISDN
 • QSIG
 SIP
 • RFC 3261 - SIP
 • RFC 2976 - SIP INFO
 • RFC 3891 - SIP Replace
 • RFC 3515 - SIP Refer
 • RFC 2396 - URI
 • RFC 2388 - DTMF

Trunk Features

ANI
 Automatic trunk maintenance
 Caller ID name
 Caller ID number
 Centrex flash
 Dial-in prefix
 Dial-out prefix
 DID
 Digit translation
 DNIS
 Network call routing
 Network/User side PRI
 Off-system extensions
 Tandem trunking
 Trunk groups

IP phone support
 MGCP
 VLAN (DHCP)
 ToS/Diff Serv
 UDP 5004 (patent pending)

DSP features

Dynamic echo cancellation
 Dynamic jitter buffer
 Lost packet handling
 Voice compression
 • Linear
 • G.711
 • ADPCM
 • G.729a

System features

Account codes
 Admission control
 Backup auto-attendant
 Bridge call appearance
 Call permissions
 Extension length (3-5 digits)
 Fax redirection
 Feature permissions
 IP phone failover
 Media encryption
 Office Anywhere
 On-net dialing (1-7 digits)

Power fail transfer
 PSTN failover
 SMDI
 SNMP

Hunt groups

Simultaneous hunt
 Top down hunt
 Single or multiple calls per extension
 Busy out group
 Busy out extension
 16 extensions max. per switch
 8 groups max. per switch
 Call forward busy
 Call forward no answer
 Scheduled modes

Note: Caller ID and Message Waiting on analog ports use FSK signalling. Analog trunks are only supported in the US and Canada.

Model	ShoreGear-120/24	ShoreGear-60/12	ShoreGear-40/8	ShoreGear-T1	ShoreGear-E1
Telephones IP Phones Analog phones	120 24	60 12	40 8		
Analog ports Universal Trunk-only (loop start) Telephone-only	8 16	8 4	2 2 4		
Digital trunks Digital trunk channels Integrated CSU Line and payload loop backs Facilities data link				24/23B+D • • •	30B+D+F • • •
System Port capacity Switch capacity	10,000 ports 200 switches	10,000 ports 200 switches	10,000 ports 200 switches	10,000 ports 200 switches	10,000 ports 200 switches
Front panel 10M/100M Ethernet (RJ-45) Analog Audio input and output (mini) T1 / E1 (RJ-48C) T1 / E1 monitor (RJ-48C) Maintenance (DB-9)	2 RJ-11, RJ-21X • •	2 RJ-11, RJ-21X • •	2 RJ-11, RJ-21X • •	2 • • •	2 • • •
Mechanical 19" rack mount Dimensions Weight	• 17.16 in. x 1.72 in. x 14.28 in. / 43.6 cm x 4.4 cm x 36.3 cm 9 lb / 4.1 kg	• 17.16 in. x 1.72 in. x 14.28 in. / 43.6 cm x 4.4 cm x 36.3 cm 9 lb / 4.1 kg	• 17.16 in. x 1.72 in. x 14.28 in. / 43.6 cm x 4.4 cm x 36.3 cm 9 lb / 4.1 kg	• 17.16 in. x 1.72 in. x 14.28 in. / 43.6 cm x 4.4 cm x 36.3 cm 8 lb / 3.6 kg	• 17.16 in. x 1.72 in. x 14.28 in. / 43.6 cm x 4.4 cm x 36.3 cm 8 lb / 3.6 kg
Power Input voltage, frequency Input current Consumption Dissipation	100-240 VAC, 50-60 Hz 2A max. 63 W max. 63 W max.	100-240 VAC, 50-60 Hz 2A max. 41 W max. 41 W max.	100-240 VAC, 50-60 Hz 1A max. 25 W max. 25 W max.	100-240 VAC, 50-60 Hz 1A max. 18 W max. 18 W max.	100-240 VAC, 50-60 Hz 1A max. 19 W max. 19 W max.
Environmental Operating temperature Operating humidity Storage temperature	0° to 50° C 0-90% non-condensing -30° to 70° C	0° to 50° C 0-90% non-condensing -30° to 70° C	0° to 50° C 0-90% non-condensing -30° to 70° C	0° to 50° C 0-90% non-condensing -30° to 70° C	0° to 50° C 0-90% non-condensing -30° to 70° C

