ERICSSON ViPr™

Clearly the choice for the most natural conversations and most productive meetings

Easy to use, standards-based, and available in configurations that work from the executive suite to large conference halls, the Ericsson ViPr™ seamlessly integrates superior quality, real-time video telephony with conferencing and presentation tools.

Advancing virtual presence communications

The definitive visual communications system, Ericsson ViPr offers dramatic “virtual presence” functionality for video interaction between two or more geographically dispersed parties. Mature and based on the H.264 standard, ViPr raises the bar for high-quality video telephony while maintaining full interoperability with standard telephone systems and legacy video conferencing.

If your operation benefits from collaboration between remote parties, a ViPr “call” is as good as a face-to-face meeting without the travel expense. And ViPr’s simple, intuitive user interface has been validated during human factors testing and through real-world experience. First-time users establish multiple-party video conferences within a few minutes with minimal training. A Virtual Share package of optional collaboration tools allows ViPr conferees to share documents and applications, including electronic white boarding via Microsoft NetMeeting. Other optional components enable conferees to view live broadcast TV, prerecorded video, or CCTV feeds during a ViPr call.
ViPr uses H.264 video encoding, a low-bandwidth encoder that is optimized for low-delay, real-time video communications. What that means to you: the highest quality video at any bandwidth.

**Key benefits**

- Broadcast-quality video and clear channel audio facilitate natural conversations, with users completely unaware of the enabling technology
- Available in a desktop-only configuration, conference room configurations, or a fully compatible combination
- Provides one-on-one and multi-party conferencing services, ad-hoc meeting capabilities, and fully integrated telephony services over highly reliable networks
- Supports operation over high-speed encrypted networks
- Features a SIP-based VoIP architecture for multi-site communications applications
- Offers easy-to-use touchscreen operation with an intuitive graphical user interface
- Requires very little training to operate
- Provides always-on availability for event-driven collaboration, a major advantage over scheduling a video conferencing room
- Integrates with existing private branch exchanges and the public switched telephone network
- Interoperates with traditional H.323- and H.320-based video conferencing systems

The most effective network appliance available to facilitate multimedia communications to locations around the world, ViPr can be used for a multitude of applications, including:

- Real-time briefings/situational decision making enhanced with collaboration and presentation media
- Real-time emergency response and preparedness communications
- International, national, statewide and countywide meetings
- Training
- Distance learning
- Real-time telemedicine
- Distributed teamwork

Each ViPr user can connect up to 15 parties. And a variety of endpoint configurations makes it easy to choose the ViPr system that is the best fit for any collaborative environment:

- **4000 Series personal (desktop) systems**
  - VMC4000: Ericsson ViPr
  - VMC4200: Ericsson ViPr + Virtual Share
  - VMC4400: Ericsson ViPr + Virtual Share + extended I/O

- **5000 Series rack-mounted group systems**
  - VMCS5000: Ericsson ViPr
  - VMCS5200: Ericsson ViPr + Virtual Share
  - VMCS5400: Ericsson ViPr + Virtual Share + extended I/O

- **6000 Series table-mounted group systems**
  - VMCS6000: Ericsson ViPr
  - VMCS6200: Ericsson ViPr + Virtual Share
  - VMCS6400: Ericsson ViPr + Virtual Share + extended I/O
Network connectivity

The Ericsson ViPr operates over IP/Ethernet and Asynchronous Transfer Mode (ATM) networks. On IP networks, IEEE 802.1p prioritization and DiffServ prioritize ViPr traffic and guarantee Quality of Service (QoS). End-to-end switched virtual circuits provide QoS on ATM networks. Point-to-multipoint (ATM networks) and multicast (IP networks) functions minimize and manage the bandwidth required for multi-party conferencing and video distribution. ViPr also operates over high-speed encrypted networks.

ViPr Application Server

A ViPr Application Server, the ViPr “command center,” uses Session Initiation Protocol (SIP) to establish, modify, and clear multiple-stream multimedia sessions. The server is also the central storage device for users’ terminal settings and address books, which allows users to access their preferences from any ViPr endpoint. With the ViPr Application Server, 25 users can log in to the system at the same time. A High-Availability version of the ViPr Application Server provides added support for up to 100 simultaneous users.

4000 Series personal systems

Ericsson ViPr endpoints for executive offices combine the most popular features (hold, transfer, speed dial, call forwarding, call forwarding) of an office telephone with real-time, face-to-face video for a true virtual presence experience.

The 17-inch (diagonal) touchscreen with graphical user interface displays full-motion, full-color video with 1280x768 (16:9) resolution and a wide viewing angle. As an available option, the screen may also function as a PC monitor to save desktop space.

ViPr’s high-fidelity audio system delivers crystal clear voice communications. An advanced stereo acoustic echo canceller (AEC) and noise reduction filters enable users to speak naturally, even in noisy settings. And an integrated, hearing-aid compatible handset (or optional stereo headset) disables the microphone array and speakers for privacy.

And with ViPr, there is no delay or lost audio when multiple parties speak at once. Compared to conventional video conferencing that tends to degrade into walkie talkie-like exchanges, the ViPr 4000 Series Media Center facilitates truly interactive discussions. With ViPr video and audio, conferees interact as if they were in the same room.

5000 and 6000 Series group systems

To address various requirements for conference-room based systems, Ericsson ViPrs for group conferencing are available in two endpoint configurations:

- The 5000 Series, a traditional, affordable 2U high codec “box” that is rack-mounted and can be operated with a wireless mouse or interfaced to a room-based control system.
- The 6000 Series, a modified version of the 4000 Series personal system that can be installed in a conference room (or mounted into a conference table). The system is controlled with the ViPr touchscreen or with a wireless mouse.

Ericsson ViPrs for groups offer the same full-motion, full-color video and clear-channel audio quality as the personal system, but they’re designed for meeting rooms, classrooms, and conference halls. An enhanced call screen format displays two large, wide images — while simultaneously displaying 14 thumbnail images — so even far-end conferees are visible on screen.
A complete group solution includes Ericsson ViPr 5000 or 6000 Series endpoints, a ViPr Application Server, and peripherals including:

- A 16:9 display device (plasma or LCD, or an LCD projector with screen)
- A pan-tilt-zoom camera that allows users to quickly and easily adjust the local camera position
- External speakers
- Audio conferencing system (with acoustic echo cancellation)
- Microphones

Please contact your Ericsson sales representative for the latest list of compatible peripherals.

**ViPr Virtual Share collaboration tools**

No matter what endpoint configurations you choose, Ericsson makes it easy to share documents and transfer files with the optional ViPr Virtual Share package of collaboration and productivity tools:

- With ViPr docShare, a ViPr user can directly connect a ViPr endpoint with a PC to share PowerPoint presentations, Microsoft Word documents, digital pictures, and Microsoft Excel spreadsheets with other ViPr conferees.

- Users with ViPr appShare can automatically launch Microsoft NetMeeting, the real-time conferencing and collaboration application that allows conferees to transfer files, conduct whiteboard sessions, text message, and more during a ViPr conference.

To save desktop real estate, any ViPr user with the Virtual Share collaboration package can use an Ericsson ViPr 4200 or 4400 system as their PC monitor.

**ViPr SIP Firewall**

The ViPr SIP Firewall, powered by BorderWare, provides advanced protection against network and application layer threats for customers who use Ericsson ViPrs across private or public networks.

Installed at each customer location, the ViPr SIP Firewall, a BorderWare Technologies SIPassure product optimized for the Ericsson ViPr, provides comprehensive SIP security at the application layer through:

- Dynamic User Datagram Protocol (UDP) port allocation specifically for SIP media streams
- Network address translation (NAT) support between local and wide area network (LAN and WAN) ports
- Tunneling of multicast media streams received on the LAN port using unicast streams on the WAN port (and vice versa)
Key to the ViPr SIP Firewall’s effectiveness: application layer security that extends beyond conventional perimeter firewalls and session border controllers to protect ViPr users from a range of threats inherent in IP communications. For more about this product, please refer to the ViPr Component Options data sheet.

The most natural conversations and the most productive meetings

With the highest quality video and audio at bandwidths ranging from 384 Kbps to 3 Mbps, personal and group configurations, a Virtual Share package of collaboration and productivity tools, and the security of an application layer firewall, The Ericsson Ericsson ViPr is far superior to (and more flexible than) conventional video conferencing. To see the difference that the always-on, easy-to-use ViPr can make for your organization, please contact your Ericsson sales representative, call 1-866-ERICSSON, or visit www.ericsson.com.

What you need for ViPr conferencing

- IP/Ethernet or ATM network
- Your choice of Ericsson ViPr personal or group endpoints (unlike with other systems, no multi-conference units, or MCUs, are required with ViPr)
- Display screens, cameras, microphones, and speakers (for group systems)
- Your choice: ViPr Application Server or High-Availability ViPr Application Server

Available ViPr options

- Virtual Share collaboration package (order the Ericsson ViPr in x200 and x400 configurations)
- Media Server (to display live TV, CCTV camera feeds or other video sources)
- SIP Firewall (to conference across a public network)
- Unicast Audio Mixer and telephony gateways (allow PSTN or VoIP devices to be used)
- SIP/H.323 and H.323/H.320 gateways (to interoperate with legacy video conferencing equipment)

Please see the ViPr Component Options Data Sheet for more information about available ViPr options.
Key features

Video
- Up to 14 remote-party conference participants (i.e., 15-way visual conference)
- Support for live TV broadcasts (e.g., CNN, Fox News, or MSNBC) to the desktop
- Participants rendered at 30 frames per second of VGA image resolution
- Low-delay (<100 ms) H.264 encoding with H.261 and H.263 compatibility options
- Self view
- English, Japanese, and Simplified Chinese language support

Video viewer
- Displays video channels broadcast from the optional ViPr Media Server (see the ViPr Component Options Data Sheet for additional information).
  - Live TV/cable broadcasts
  - VCR/DVD viewing
  - Security and public camera feeds
  - Presentations
  - Any other video source
- Supports simultaneous viewing of up to three channels (when not in a conference)
- Available channels are displayed for user selection
- Users can view video while on a call
- Features independent audio volume/mute for each video channel

Audio
- Hands-free operation
- Full-duplex audio
- Stereo acoustic echo canceller (AEC), ViPr 4000 Series personal systems only
- Automatic gain control (AGC)
- Wideband audio — 16-bit, 16 KHz uncompressed pulse code modulation with G.728, G.722, G.721 and G.711 compatibility options
- High-fidelity stereo output with volume control
- PC audio pass-through, ViPr 4000 Series personal systems only
- Microphone/speaker mute

Telephone features
- On-screen touch dial pad and keyboard
- Caller ID
- Hold
- Call transfer
- Conference
- Speed dial
- Redial/call history
- Call forwarding
- Do not disturb

User-based calling
- Login is via Windows/Kerberos user ID and password
- Phone “personality” moves with login
  - When a user logs in to a ViPr at a remote site, all personalized settings appear
  - Contacts, speed dials, and ring preferences move with the user
  - Calls for a specific user automatically route to the ViPr station where the user is logged in
  - ViPr features automatic “find me/follow me” technology
- SIP uniform resource identifiers (URIs) are used as “phone numbers” and resemble e-mail addresses (e.g., vipr.user@sip.ericsson.com)
- PBX extensions (with optional analog or digital gateways) are automatically forwarded to the ViPr station where the user is logged in

Presence services
- Users are able to know before a call is placed whether the called party is likely to answer
- SIP for Instant Messaging and Presence Levering Extensions (SIMPLE) presence client
- Full state tracking (available, busy, do not disturb, out of office)
- Allows customized call-routing rules for each presence state
- Contact-based filtering privacy controls
- Contact database
- Full name, organization, address
- Multiple phone numbers (SIP URIs and numeric)
- One-touch dialing to any contact
- Presence information is shown for all subscribed contacts
- Search and sort-by features
- Users can search corporate directories via Lightweight Directory Access Protocol (LDAP)

Call history features
- Four call categories: incoming, outgoing, missed, and frequently dialed
- Automatic storage of the 20 most recent calls in each category
- One-touch redial of any entry
- Caller ID display
- Function to save any entry as a contact in the database
- ViPr call session logs are available for call tracking and management purposes

Standards
- ViPr products are RFC 3261-compliant
- Supports the ability to make calls to/from standard SIP phones and gateways
- IPv6
**Ordering information**

For ordering information about ViPr component options, please see the ViPr Component Options data sheet.

### Personal Systems

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Interface</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMC-4000-E</td>
<td>Ericsson ViPr 4000, desktop, 10/100Base-T interface</td>
<td>10/100Base-T</td>
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<tr>
<td>VMC-4000-U</td>
<td>Ericsson ViPr 4000, desktop, 155 Mbps ATM (UTP) interface</td>
<td>155 Mbps ATM (UTP)</td>
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<tr>
<td>VMC-4000-A</td>
<td>Ericsson ViPr 4000, desktop, 155 Mbps ATM (MMF, SC) interface</td>
<td>155 Mbps ATM (MMF, SC)</td>
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<tr>
<td>VMC-4000-F</td>
<td>Ericsson ViPr 4000, desktop, 100Base-FX Ethernet interface</td>
<td>100Base-FX Ethernet</td>
</tr>
<tr>
<td>VMC-4200-E</td>
<td>Ericsson ViPr 4200, desktop + Virtual Share, 10/100Base-T interface</td>
<td>10/100Base-T</td>
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<tr>
<td>VMC-4200-U</td>
<td>Ericsson ViPr 4200, desktop + Virtual Share, 155 Mbps ATM (UTP) interface</td>
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<td>VMC-4200-A</td>
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<td>Ericsson ViPr 4200, desktop + Virtual Share, 100Base-FX Ethernet interface</td>
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<tr>
<td>VMC-4400-E</td>
<td>Ericsson ViPr 4400, desktop + Virtual Share + Ext I/O, 10/100Base-T interface</td>
<td>10/100Base-T</td>
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<tr>
<td>VMC-4400-U</td>
<td>Ericsson ViPr 4400, desktop + Virtual Share + Ext I/O, 155 Mbps ATM (UTP) interface</td>
<td>155 Mbps ATM (UTP)</td>
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<tr>
<td>VMC-4400-A</td>
<td>Ericsson ViPr 4400, desktop + Virtual Share + Ext I/O, 155 Mbps ATM (MMF, SC) interface</td>
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<td>VMC-4400-F</td>
<td>Ericsson ViPr 4400, desktop + Virtual Share + Ext I/O, 100Base-FX Ethernet interface</td>
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### Group Systems

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<tr>
<td>VMC-5000-E</td>
<td>Ericsson ViPr 5000, 2U codec, 10/100Base-T interface</td>
<td>10/100Base-T</td>
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<td>VMC-5000-U</td>
<td>Ericsson ViPr 5000, 2U codec, 155 Mbps ATM (UTP) interface</td>
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<td>VMC-5200-E</td>
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<td>VMC-5400-E</td>
<td>Ericsson ViPr 5400, 2U codec + Virtual Share + Ext I/O, 10/100Base-T interface</td>
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<td>VMC-5400-U</td>
<td>Ericsson ViPr 5400, 2U codec + Virtual Share + Ext I/O, 155 Mbps ATM (UTP) interface</td>
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<td>Ericsson ViPr 5400, 2U codec + Virtual Share + Ext I/O, 100Base-FX Ethernet interface</td>
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### ViPr Application Server

#### Hardware

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<th>Platform</th>
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<tr>
<td>VSIPSA-10/100</td>
<td>10/100Base-T Ethernet (RJ-45) platform; minimum purchase of a 5-user software license required</td>
<td>10/100Base-T</td>
</tr>
<tr>
<td>VSIPSA-ATM/UTP</td>
<td>155 Mbps ATM (UTP) platform; minimum purchase of a 5-user software license required</td>
<td>155 Mbps ATM (UTP)</td>
</tr>
<tr>
<td>VSIPSA-ATM/MMF</td>
<td>OC-3 (155 Mbps) ATM (MMF, SC) platform; minimum purchase of a 5-user software license required</td>
<td>OC-3 (155 Mbps) ATM (MMF, SC)</td>
</tr>
<tr>
<td>VSIPSA-100FX</td>
<td>100Base-FX platform; minimum purchase of a 5-user software license required</td>
<td>100Base-FX</td>
</tr>
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#### User licenses

<table>
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<tr>
<th>Model</th>
<th>Description</th>
<th>Restrictions</th>
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<tbody>
<tr>
<td>VSIPS-5</td>
<td>ViPr Application Server license; supports up to 5 users logged in simultaneously; only available with initial purchase</td>
<td></td>
</tr>
<tr>
<td>VSIPS-25</td>
<td>ViPr Application Server license; supports up to 25 users logged in simultaneously; only available with initial purchase</td>
<td></td>
</tr>
<tr>
<td>VSIPS-UPGRADE1</td>
<td>ViPr Application Server license upgrade; increases maximum number of simultaneous users from 5 to 25</td>
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### High-Availability ViPr Application Server

#### Hardware

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<tr>
<td>HA-VSIPSA-10/100</td>
<td>10/100Base-T Ethernet platform (RJ-45); minimum purchase of a 5-user software license required</td>
</tr>
<tr>
<td>HA-VSIPSA-ATM/UTP</td>
<td>155 Mbps ATM (UTP) platform; minimum purchase of a 5-user software license required</td>
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<tr>
<td>HA-VSIPSA-ATM/MMF</td>
<td>OC-3 (155 Mbps) ATM (MMF, SC) platform; minimum purchase of a 5-user software license required</td>
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<td>HA-VSIPSA-100FX</td>
<td>100Base-FX platform; minimum purchase of a 5-user software license required</td>
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<td>HA-VSIPS-25</td>
<td>High-Availability ViPr Application Server license; supports up to 25 users logged in simultaneously; only available with initial purchase</td>
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<tr>
<td>HA-VSIPS-50</td>
<td>High-Availability ViPr Application Server license; supports up to 50 users logged in simultaneously; only available with initial purchase</td>
</tr>
<tr>
<td>HA-VSIPS-100</td>
<td>High-Availability ViPr Application Server license; supports up to 100 users logged in simultaneously; only available with initial purchase</td>
</tr>
<tr>
<td>HA-VSIPS-UPGRADE1</td>
<td>High-Availability ViPr Application Server license upgrade; increases maximum number of simultaneous users from 5 to 25</td>
</tr>
<tr>
<td>HA-VSIPS-UPGRADE2</td>
<td>High-Availability ViPr Application Server license upgrade; increases maximum number of simultaneous users from 25 to 50</td>
</tr>
<tr>
<td>HA-VSIPS-UPGRADE3</td>
<td>High-Availability ViPr Application Server license upgrade; increases maximum number of simultaneous users from 50 to 100</td>
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