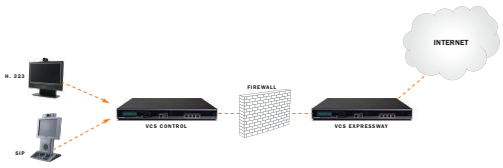

# TANDBERG Video Communication Server

## Expressway™ Application

**The TANDBERG Video Communication Server (VCS), deployed with the Expressway™ Application, provides standards-based firewall traversal for SIP and H.323 devices. Communicate with the outside world regardless of protocol, enable migration to SIP and future-proof existing H.323 investments.**




### DESIGN FEATURES

- Designed to work with any H.323 or SIP device
- Appliance-based architecture enables easy deployment and high reliability
- Designed to work with any firewall
- Full multi-vendor support
- Secure and reliable
- 1U rack mountable

### APPLICATION FEATURES

- Firewall Traversal H.460.18/19 Compliant including support for Multiplexed Media
- Firewall Traversal STUN Compliant
- Traverse any number of firewalls
- Policy Engine for processing calls
- URI and ENUM Dialing
- Device authentication using H.235
- Embedded setup wizard for easy installation

### PERFORMANCE FEATURES

- Supports up to 2,500 registered devices and 100 concurrent traversal calls
- Enables URI dialing for massive scalability
- HTTPS, SSH and SCP for secure management
- Uses compact flash for critical storage and a hard drive for other functions

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### TANDBERG VCS MAIN FEATURES

H.323 gatekeeper (Control Application)
SIP Proxy/Registrar (Control Application)
Firewall Traversal (Expressway™) functionality enabling secure traversal of any firewall or NAT. (Expressway Application)
Registration of traversal-enabled endpoints (Expressway Application)
STUN discovery and STUN Relay services (Expressway Application)
SIP and H.323 support, including SIP/H.323 gatewaying for locally registered endpoints
SIP and H.323 gatewaying for non-registered endpoints
IPv4 and IPv6 support, including IPv4/IPv6 gatewaying
Bandwidth management on both a per-call and a total usage basis, configurable separately for calls within the local subzones and to neighboring systems and zones
Automatic downspeeding option for calls that exceed the available bandwidth
URI and ENUM dialing via DNS, enabling global connectivity
Up to 2,500 registrations
Up to 500 non-traversal calls
Up to 100 traversal calls
Up to 200 neighboring zones
Flexible zone configuration with prefix, suffix and regular expression support
Can function as a standalone VCS or be neighbored with other systems such as VCSs, Border Controllers, Gatekeepers and SIP proxies
Supports up to 5 Alternate VCSs for redundancy purposes
Optional endpoint authentication
Control over which endpoints that are allowed to register
Administrator Policy including support for CPL
Embedded setup wizard via a serial port for initial configuration
System administration via a web interface or RS-232, Telnet, SSH, and HTTPS
Can be managed with TANDBERG Management Suite 11.8 or newer

### OPTIONAL FEATURES

TANDBERG FindMe™ (User Policy)
Dual Network Interface

### ARCHITECTURE

Secure appliance based architecture
Flash memory and hard drive
ITU-T H.323 v5 compliant
ITU-T H.225 v4 compliant
TANDBERG Expressway Technology
H.323 v5 Annex O (for DNS dialing support)
H.460.18/.19 compliant
H.460.18 client proxy support
Supports H.460.19 multiplexed media

### RELIABILITY

Registrations survive system restart
Fast start-up time
Expressway™ process recycling within seconds
H.225 Alternate Gatekeeper Support

### SECURITY

Secure Management with HTTPS, SSH and SCP
– Secure File Transfer
– Inactivity Timeout
Can lock-down IP services
Authentication required on HTTP(S), Telnet, SSH, SCP and serial port
Compatible with H.235 v2 and v3 enabled H.323 devices
H.235 Authentication support
TLS for SIP signaling

### MANAGEMENT

Supports industry standards such as RS-232, Telnet, HTTP(S), XML, SNMP, SCP and SSH
Embedded setup wizard on serial port for initial configuration
Advanced management support and configuration with TANDBERG Management Suite 11.8 or newer
Call logging and diagnostics
Support for logging to a syslog server
Local time zone aware

### CALL CONTROL AND REGISTRATIONS

Supports manual registration of H.323 and SIP endpoints and API call control
Supports H.225/Q.931, H.245 call control routed mode
Registration of H.323 ID, E.164 aliases and services
Supports H.323-SIP Interworking Encryption
Supports H.323-SIP Interworking DuoVideo
Supports Unicode (UTF-8) registration for global implementation
Disconnect H.323 calls from the API interface
URI Dialing
Up to 100 traversal calls
Up to 100 services for a single device
Up to 2,500 registered Expressway Devices
Direct call signaling between neighbored VCSs, border controllers and gatekeepers
Call Policy Management (RFC 3880) including Administrator Policy and User Policy (FindMe)

### ZONE CONTROL

Supports Remote Zone monitoring
Supports Remote Zone redundancy
Supports up to 200 neighbor zones (including VCSs, Border Controllers, gatekeepers and SIP proxies)
Supports sub-zone area definition for bandwidth management
Flexible zone configuration with named zones and default zone
Supports forwarding of requests to neighbor zones (including VCSs, border controllers, gatekeepers and SIP proxies)
Registration Control (open, specifically allow, specifically deny)

### BANDWIDTH MANAGEMENT

Interzone — definable call by call
– Max bandwidth per call
– Max aggregate bandwidth for all neighboring zones
Intrazone — definable call by call
– Max bandwidth per call
– Max aggregate bandwidth
Auto-downspeeding if call exceeds per-call maximum
Gateway load balancing

### INTERFACES

4x 10/100/1000 Base-TX Ethernet ports (RJ-45) (front)
1x RS232 console port (RJ-45) (front)
2x USB (front)

### POWER

Auto-sensing 250W (Max) power supply
90–264V AC full range @ 47–63Hz

### COOLING SYSTEM

Two 40mm fans for system cooling

### SYSTEM CONTROL AND INDICATIONS

1x Power LED
1x Alarm LED
1x Power on/off switch (rear)
4x Act/Link/10/100 LEDs on Ethernet Port

### NETWORK

Supports DNS Addressing
Supports IPv4 and IPv6 simultaneously
Provides IPv4/IPv6 Translation Services

### APPROVALS

Directive 73/23/EEC (Low Voltage Directive)
– Standard EN 60950
Directive 89/336/EEC (EMC Directive)
– Standard EN 55022, Class A
– Standard EN 55024
– Standard EN 61000-3-2/-3-3
Approved according to UL 60950 and CAN/CSA C22.2 No. 60950
Complies with FCC15B Class A

### DIMENSIONS

426(W) x 228.6(D) x 43.5(H) mm (16.8" x 9" x 1.72")
1U rack-mount chassis

### ENVIRONMENT

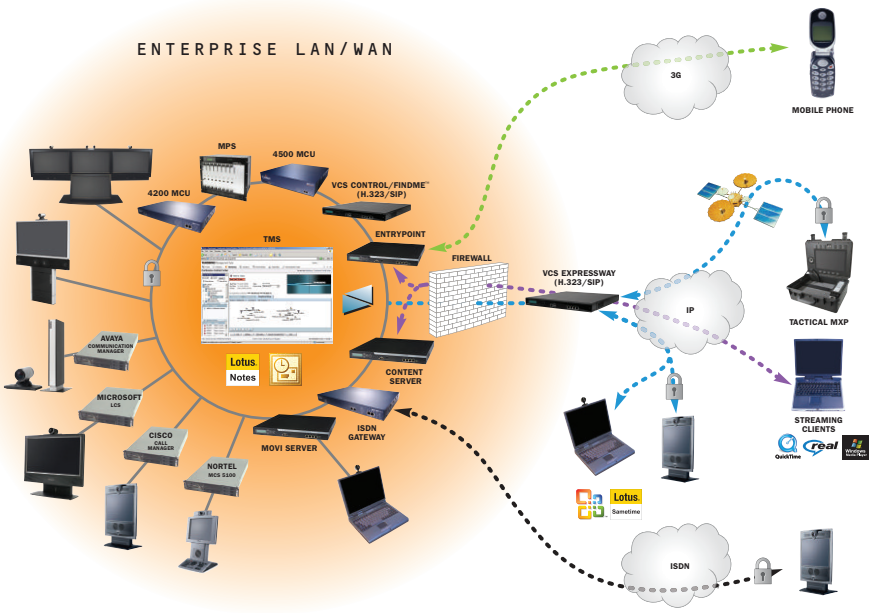
Operating temperatures: 0° C to 40° C (32° F to 104° F)
Storage temperatures: -20° C to 80° C (-4° F to 140° F)
Relative humidity: 10% to 90% (Non-condensing)

### CERTIFICATION

LVD 73/23/EC
EMC 89/366/ECC

VCS Version X1 is ICSA Labs Certified

### AWARDS


*All specifications subject to change without notice, system specifics may vary.*

*All images in these materials are for representational purposes only, actual products may differ.*



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## Expressway™ Application

*TANDBERG WORLD HEADQUARTERS*
*Philip Pedersens vei 20*
*1366 Lysaker, Norway*
*Tel: +47 67 125 125*
*Fax: +47 67 125 234*
*Video: +47 67 126 126*
*tandberg@tandberg.com*

*1212 Avenue of the Americas,*
*24th Floor*
*New York, NY USA 10036*
*Tel: +1 212 692 6500*
*Fax: +1 212 692 6501*
*Video: +1 212 692 6535*
*tandberg@tandberg.com*

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