High-quality set-top

VEGA® X5

Highest Quality
Crystal clear audio and superior video quality at 4 Mbps

Enhances Collaboration
Built-in MCU connects up to 8 sites with Continuous Presence and embedded PowerPoint® presentations

Convenient
Fully featured set-top solution with embedded XGA ports and support for 3 monitors

Vega® X5 is a high-performance system at the cutting-edge of set-top technology.
It is ideal for medium and large-sized videoconferencing sessions that require enhanced audio and video quality.
The integrated Multipoint Conferencing Unit (MCU) connects up to 8 sites in mixed mode (ISDN and IP), with convenient Dial-out and Dial-in (Meet Me) configuration.

Supports multiple connectivity
Available in several versions: for connections up to 768 kbps over ISDN BRI and 4 Mbps over IP; as well as connections up to 2 Mbps over ISDN PRI or over leased lines (X.21, V.35, RS449, RS366, G.703).

Simultaneous Dual-Stream video
Convenient XGA input and output ports provide one-step PC plug-in for simultaneous dual-stream video and live PC presentations with enhanced images.

Easy to configure
Flexible, simple architecture enables easy re-configuration of the system. Ready to upgrade simply by adding different cards.
Change the channel aggregator card and upgrade from BRI to PRI in one easy step!

Patented Voice Tracking
Voice Tracking technology enables the camera to automatically track and frame the person who is speaking.

Customizable Graphic User Interface
The user is able to choose layouts and colours from a variety of alternatives.

VEGA® X5

Technical Specifications

Supported Standards

• ITU-T H.320	ISDN, leased networks
• ITU-T H.323	IP networks
• IETF-SIP (RFC3261)	IP networks
• PPPoE	
• Video	H.261, H.263++, H.264 H.239, H.241
• Audio	G.711, G.728, G.722, G.722.1, MPEG4 AAC-LD
• Data	T.120
• LDAP	H.350
• MCU compatibility	H.243, H.231

Transmission

• Bit rate 56 kbps ÷ 768 kbps over ISDN BRI
56 kbps ÷ 2 Mbps over ISDN PRI**
64 kbps ÷ 4 Mbps over IP (H323/SIP)
64 kbps ÷ 4 Mbps over IP (H323/SIP) option Asymmetric rates
56 kbps ÷ 2 Mbps over V.35/Leased

**in North America ISDN PRI/T1 at 1544 kbps (ANSI T1 recommendations)

• Simultaneous video motion coding and PC presentations from the XGA input

Video

• Frame rate	15 frames per second @ 56 kbps -128 kbps 30 frames per second @ 168 kbps - 4 Mbps
• Video resolution	4CIF 704 x 576 pixels FCIF 352 x 288 pixels QCIF 176 x 144 pixels 4CIF 704 x 576 pixels for still images (H.261 Annex D) 4SIF 704 x 480 pixels SIF 352 x 240 pixels QSIF 176 x 120 pixels 4SIF 704 x 480 pixels for still images (H.261 Annex D) Up to 1024 x 768 pixels over XGA in H.263
• Remote camera control	H.281 (H.320 - H.323)

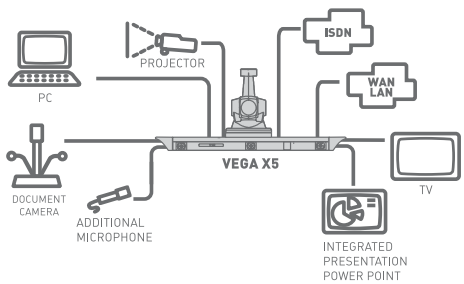
Audio

Audio	Band	Bit rate
G.711	300 ÷ 3400 Hz	48/56/64 kbps
G.728	50 ÷ 3400 Hz	16 kbps
G.722	50 ÷ 7000 Hz	48/56/64 kbps
G.722.1	50 ÷ 7000 Hz	24/32 kbps
AAC-LD	50 ÷ 14000 Hz	48/56/64 kbps

• Echo cancellation — Full-duplex
• Adaptive post filtering
• Automatic Gain Control (AGC)
• Automatic Noise Suppression

Audio Tracking

• Tracking	Enhanced Voice Tracking
• Coverage	max. 6 m, recommended 3 m
• Location	±60° horizontal, ±25° vertical



Hi-Band Digital Microphone Pod

• Range	360°
• Response	50 ÷ 14000 Hz
• Microphones	3
• Mute button	
• Up to 2 pods in a daisy-chain configuration	

Built-in Camera

• Resolution	752 x 582 pixels
• Presets	122 presets
• H. angle of view	6.6 to 65 degrees
• Zoom	40x (10x optical + 4x digital)

Supported Monitor

• Format	PAL, NTSC, HighDef
• Single, Dual monitor, HighDef	
• PIP and PAP function	
• 16:9	
• Dual Monitor Emulation	

Network Interfaces

• Basic version Ethernet 2-Port 10/100BASE-T full-duplex with integrated switch Ethernet	2 RJ-45
• Optional ISDN 1/6 BRI with integrated channel aggregator	1/6 RJ-45
or 1 E1/T1 PRI with integrated channel aggregator	1 RJ-45
or Leased networks X.21/V.35/RS366/RS449	44 pin Hi/Den
or G.703	1 RJ-45

Network Protocols

• TELNET, HTTP, SNMP, DNS, DHCP, RTP/RTCP, TCP/UDP, ARP

Network Features

• Differentiated Service (DIFFSERV), IP Precedence, IP Type of Service (ToS), Auto Gatekeeper Discovery, Clever Packets Management (AeCPM)

Audio/Video Interfaces

• Video inputs

Main camera	Integrated Y/C, not accessible
VCR	Composite (RCA)
Doc. Cam. 1	S-video (Mini-DIN)
Doc. Cam. 2	S-video (Mini-DIN)
Doc. Cam. 3	Composite (RCA)
XGA In	DB 15 Hi/Den

• Video outputs

Monitor 1	Composite (RCA) S-video (Mini-DIN)
Monitor 2	S-video (Mini-DIN) with monitor detect
VCR	Composite (RCA)
XGA Out	DB 15 Hi/Den

• Audio inputs

Connection	Level	Connector
2xPod mic. 360°	Dig.	RJ-11 6/6
Aux. mic.	Mic	Stereo jack 3.5 mm
Audio In	Line	RCA
VCR	Line	2 RCA (L/R)

• Audio outputs

Connection	Level	Connector
Monitor 1	Line	2 RCA (L/R)
VCR	Line	2 RCA (L/R)

HighDef (XGA)

• Input	VGA, SVGA, XGA
• Output	VGA, SVGA, XGA

Auxiliary Interfaces

• Data RS232	Mini-DIN 8-pin with DB9 adapter
• Diagnostics RS232	Mini-DIN 8-pin
• VISCA RS232	Mini-DIN 8-pin
supports Canon or Sony, aux PTZ camera	
• PC card	1 PCMCIA, type II for Wi-Fi card

Closed Captioning/Text Chat

• T.140 text chat, available from Web

User Interface

• Multilingual on-screen graphic user interface
• User selectable languages:
Italian, English, French, Spanish, German, Portuguese, Norwegian, Swedish, Russian, Czechoslovakian, Hungarian, Polish, Finnish, Simplified Chinese, Traditional Chinese, Japanese, Korean
• Infrared remote control for full function control
• Contextual help
• Diagnostics and management functions
• Call progress monitoring
• Supports AMX™ or Crestron™
• Customizable Graphic User Interface
• Web streaming function: UNICAST and MULTICAST compatible with QuickTime™

Multipoint Function (option)

• Integrated MCU	H.320, H.323 and SIP mixed mode
8 participants	@ 256 kbps
6 participants	@ 384 kbps
5 participants	@ 512 kbps
4 participants	@ 768 kbps
3 participants	@ 1 Mbps
• Compatible with analog and mobile networks	
• Video coding	H.261, H.263++, H.264 (v11)
• Audio coding	G.711, G.722, G.722.1, G.728
• Chair control	H.243

• Dial-In/Dial-Out capabilities
• Continuous Presence
• Encryption
• H.239 Dual-video from any site

Encryption

• AES encryption standard H.233, H.234, H.235
• NIST (National Instute of Standards & Technology) certified

Web Management

All the configuration, call, diagnostics and management functions are accessible using the following web browsers: Microsoft® Internet Explorer™, Netscape Navigator™

Remote Diagnostics and Management

	Local	Web Browser	SNMP
Self test	Yes	Yes	Yes
Diagnostics	Yes	Yes	Yes
Configuration	Yes	Yes	Yes
Call	Yes	Yes	
Error tracking	Yes	Yes	Yes

Integrated Presentation

• Supported applications	Microsoft® PowerPoint®
• Multimedia support	T.120

Power Supply

• 100-240 Vac 50-60 Hz 1.5 A Max

Dimensions

• VEGA X5

Width	54	cm (21.25")
Height	22.5	cm (8.85")
Depth	23	cm (9.05")

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