

# vega® x7r

## High Definition Video Communication System



### Versatile

Flexible codec solution with embedded HD inputs and outputs created specifically for customized installations in conference rooms of any size

### Adaptable

Can be connected to any room device i.e. HD projector, PC, sound system and camera

### Professional Collaboration

The built-in MCU connects up to 9 sites with Continuous Presence and in mixed IP-ISDN mode



Vega® X7R is the codec solution for HD (High Definition) connections created specifically for systems integrators, and is ideal for professional video communication applications in medium to large conference rooms. Rack-mountable, it enables the integration of audio and video peripherals to create customized solutions with High Definition quality.

### Native HD System

Vega® X7R is a high-performance rack-mount codec at the cutting-edge of HD systems technology, the result of the most advanced research and development.

### Multiple Network Connectivity

Vega® X7R is available in several versions: for connections up to 384 kbps (768 kbps with optional XLNA) over ISDN BRI and 4 Mbps over IP. Furthermore, with XLNA it is able to support ISDN PRI connections and leased networks (X.21, V.35, RS449, Rs530, G.703).

### Multipoint Conferencing

The integrated Multipoint Conferencing Unit (MCU) connects up to 9 sites with Continuous Presence for simultaneous visualization of participants. The convenient dial-in and dial-out mode allows mixed mode (ISDN, IP-H.323 and IP-SIP) connections.

### Easy Configuration

The initial configuration can be extended, increasing the features required. The multiple configurations allow the system to be used in a variety of situations thanks to a highly flexible architecture.

### Supported Standards

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

### Transmission

- Bit rate 56 kbps ÷ 768 kbps over ISDN BRI (1)  
56 kbps ÷ 2 Mbps over ISDN PRI (2)(\*\*)  
64 kbps ÷ 4 Mbps over IP (H323/SIP)  
Asymmetric rates  
56 kbps ÷ 2 Mbps over V.35/Leased (2)
- Simultaneous video motion coding and PC presentations from the XGA input  
(1) Up to 384 kbps with sw option, up to 768 kbps with hw option external XLNA module  
(2) With external XLNA module  
(\*\*)in North America ISDN PRI/T1 at 1544 kbps (ANSI T1 recommendations)

### Video

- Frame rate 15 frames per second @ 56 kbps -128 kbps  
30 frames per second @ 168 kbps - 4 Mbps
- Fields 60 fields per second @ 384 kbps - 4 Mbps  
720p 1280 x 720 pixels  
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    |
| G.722.1 Annex C | 50 ÷ 14000 Hz | 24/32/48 kbps |
| AAC-LD          | 50 ÷ 14000 Hz | 48/56/64 kbps |
- Echo cancellation Full-duplex
  - Adaptive post filtering
  - Automatic Gain Control (AGC)
  - Automatic Noise Suppression

### Hi-Band Digital Microphone Pod

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

### 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 3 BRI with integrated channel aggregator 3 RJ-45
- Network Module: IDC type connector to connect the Xline Network Adapter
- ISDN 6 BRI with integrated channel aggregator 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, STUN, SNTP, FTP

### Network Features

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

### IPv6 support

- Dual Stack IPv4 and IPv6 simultaneous support

### Firewall Traversal

- Auto NAT discover HTTP and STUN
- H.460.18 H.460.19
- "Keep Alive Packet" time configurable

### Audio/Video Interfaces

- Video inputs  
Aux In Composite (RCA)  
Doc. Cam. 1 S-video (Mini-DIN)  
Doc. Cam. 2 S-video (Mini-DIN)  
Doc. Cam. 3 Composite (RCA)  
XGA In DVI-I  
2xHD High Definition Cameras
- Video outputs  
Monitor 1 Composite (RCA)  
S-video (Mini-DIN)  
S-video (Mini-DIN) with monitor detect  
Monitor 2 Composite (RCA)  
DVI-I
- Aux Out Composite (RCA)  
2xHD DVI-I
- Audio inputs  
Connection Level Connector  
1xPod mic. 360° Dig. RJ-11 6/6  
Aux. mic. Mic Stereo jack 3.5 mm  
Audio In Line RCA  
Aux In Line 2 RCA (L/R)
- Audio outputs  
Connection Level Connector  
Monitor 1 Line 2 RCA (L/R)  
Aux Out Line 2 RCA (L/R)

### 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

### Interoperability

- Microsoft® Office Communicator 2007

### User Interface

- Multilingual on-screen graphic user interface
- User selectable languages: Italian, English, French, Spanish, German, Portuguese, Norwegian, Swedish, Russian, Czech, Arabic, Hungarian, Polish, Finnish, Simplified Chinese, Traditional Chinese, Japanese, Korean, Turkish
- 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™
- Security mode (sw option)

### Multipoint Function (option)

- Integrated MCU H.320, H.323 and SIP mixed mode  
9 participants @ 256 kbps  
7 participants @ 384 kbps  
6 participants @ 512 kbps  
5 participants @ 768 kbps  
4 participants @ 1 Mbps
- Compatible with analog and mobile networks
- Video coding H.261, H.263, H.263+, H.263++, H.264
- Audio coding G.711, G.722, G.722.1, G.728, H.243
- Chair control H.243
- Dial-In/Dial-Out capabilities
- Transcoding
- IP & ISDN Auto Downsampling
- Continuous Presence
- Encryption
- H.239 Dual-video from any site
- Desktop Connectivity (optional)

### Security

- AES encryption standard H.233, H.234, H.235, H.235 Annex D
- NIST (National Institute 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	Yes
Error tracking	Yes	Yes	Yes

### Integrated Presentation

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

### Power Supply

- 100-240 Vac 50-60 Hz 2.5 A Max

### Dimensions

VEGA X7R Codec	Width	Height	Depth
	44 cm (17.5")	5,5 cm (2.14")	21 cm (8.26")

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