

# QuadroCS

REDEFINING THE CHAT ROOM



## QuadroCS: The Quadro VoIP Conference Server Redefines the Chat Room

The QuadroCS is the complete low-cost Voice over IP conference server for small and growing businesses. Connected over 10Base-T Ethernet to the Internet, the QuadroCS allows voice conferencing of up to 25 participants in one or more simultaneous call clusters. Everyone can be reached inbound and outbound. It's like having your own global chat room

### Fully-Featured Conference Server

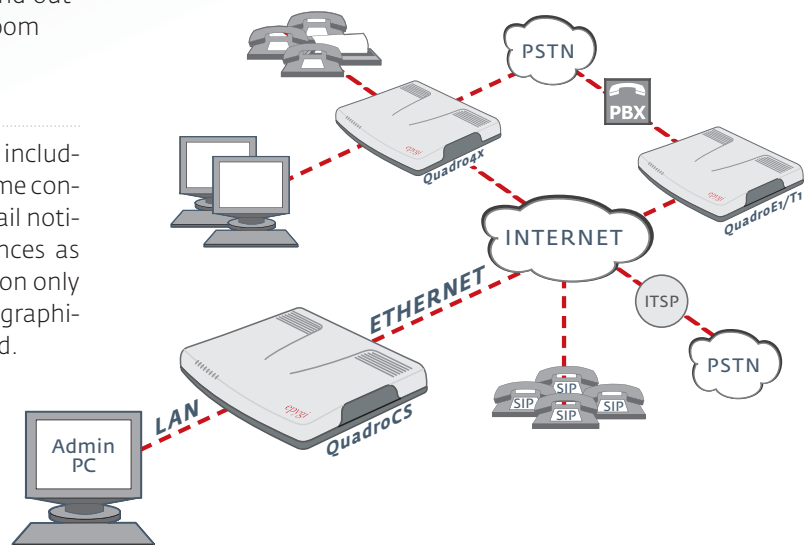
The QuadroCS offers a multitude of features including automatic dial-out to participants, meet-me conferences, locking/recording a conference, email notification and reminder of scheduled conferences as well as a conference creation wizard to mention only a few. For larger conferences, clusters of geographically dispersed QuadroCS units may be defined.

### Integrated Internet Access

The QuadroCS conference server allows voice Internet access with firewall security, including NAT.

### Lowering Costs

Monthly recurring costs for expensive conference services are eliminated with the low-cost system QuadroCS that practically manages itself.



## Telephony

### Voice Features

Voice Coding G.711, G.723 (5.3, 6.3 kbit/s), G.726 (16, 24, 32, 40 Kbps),  
G.729, iLBC (13.33 kbit/s, 15.2 kbit/s);  
(RFC 3951, ITU-T: G.711, G.723.1 Annex A, G.726,  
G.729 Annex A; IETF;  
ITU-T Q.23, Q.24, Bellcore GR.506, GR.181; ITU-  
T G.168-2000, 2002; ETS\_300659\_1,2,3)  
NAT traversal (both manually and STUN)  
VAD, CNR, G.168 echo cancellation

### Bandwidth Requirements

Per call WAN bandwidth requirements for the following codecs (non-encrypted):

G.711/G.711u	20 msec	84 kbps
G.726-16	20 msec	37 kbps
G.726-24	20 msec	45 kbps
G.726-32	20 msec	52 kbps
G.726-40	20 msec	60 kbps
G.729a	20 msec	29 kbps
G.723	30 msec	21 kbps
iLBC	30 msec	27 kbps

### Conference Features

Automatic dial-out to participants  
Lock a conference  
Record a conference  
Password protect conferences  
Email notification and reminder of scheduled conferences  
Cluster geographically dispersed CS units for larger conferences  
Participant Web GUI  
Conference creation wizard  
Meet-me conferencing  
Auto Attendant for single unified numbers to reach all conferences

### Call Signaling

SIP on the WAN and LAN side (RFCs: 3261, 3263, 3265, 3311, 3428, 3515, 3842, 3856, 3891, 3892, 3581, draft-ietf-sip-session-timer-15, draft-ietf-sipping-dialog-package-05;  
Presence: RFCs: 3842, 3856, 3863, draft-ietf-sipping-dialog-package-05)  
SDP (RFC 2327)  
RTP (RFCs: 1889, 1890, 2833, 3389, 3550, 3551, 3555,  
draft-ietf-avt-rfc2833bis-05, draft-ietf-avt-rtp-ilbc-05)  
RTP Proxy

### DTMF

Caller ID support  
In band and out of band signaling support

## Connectivity

### Premise Connections

1 Ethernet 10/100BASE-T port (RJ45)  
1 USB master connection

### Uplink Connection

1 Ethernet 10BASE-T port (RJ45)

### System Capacity

25 participants in one or more simultaneous conferences

### USB Expansion

USB memory sticks for conference recording storage

## Internet

NAT address translation  
STUN/NAT traversal (RFC 3489)  
Firewall security via:  
NAT (Network Address Translation)  
DHCP server on the LAN side  
DHCP client on the WAN side  
DNS server with forwarding functionality  
SNTP (Simple Network Time Protocol) server/client for computer clock synchronization  
IP DIFFSERV for QoS  
DNS (DYNDNS) support with third party  
SMTP client for system event notification

## System

### Management

Multilingual WEB interface accessible from LAN and WAN (HTTP/HTTPS), the WAN management access can be switched off  
Password control  
Remote diagnostics and software upgrade  
Download/restore configuration  
Reset button with factory reset option

### Diagnostics/Testing

LEDs: Busy, Info, Fault, USB, LAN, WAN,  
Power-up diagnostics

## Environmental

### Physical Dimensions

Desktop devices, wall-mountable:  
Measurements: 10.04" x 8.27" x 1.77"  
(25.5 x 21.0 x 4.5 cm)  
Weight: 22.6 ounces (640 g)

### Rack-mountable devices:

Measurements: 19" x 7.56" x 1.77"  
(48.0 x 19.2 x 4.5 cm)  
Weight: 2.47 lbs. (1060 g)

### Conditions

41°F - 104°F (5°C - 40°C) operating temperature  
41°F - 140°F (5°C - 60°C) storage temperature  
5% - 90% non-condensing humidity

### Power Supply

Input 100 - 240 VAC; 50/60 Hz; 0.5 A  
Output 12.0 VDC; 1.5 A

### Regulatory Compliance

Safety: UL 60950; CSA 22;  
EMC: FCC Part 15 Class B;  
EN55022 Class B, EN55024;  
Telecom: CTR21/TBR21



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