TEST REPORT RADVISION SCOPIA VC 240

GENERAL

PERIOD

July / August 2011

SW VERSION

The software version 2.5.1.22 was tested.

DEVICE CLASS

The system RADVISION VC 240 is an office system. It consists of a 24" monitor with FullHD resolution, which has a 16:9 ratio. The monitor can be used as a PC monitor. During a video conference, different combinations of usage scenarios with different layouts are possible.

SCOPE OF DELIVERY

The scope of delivery includes the system, all the necessary cables and the remote control.

BANDWIDTHS

The system facilitates calls according to H.323 and SIP with bandwidths up to 2048 kbps.

INSTALLATION

The installation proceeds smoothly. The device is operable after few adjustments.
The remote control is very ergonomic. All the important keys can be reached easily and are arranged in a way that should prevent accidental misuse. The settings of the software interface are clearly structured and can be reached easily as well. Therefore, it is easy to make the system ready for operation.

**AUDIO/VIDEO**

The transmitted video's quality was very good when tested with modern devices. When connected with older systems, especially desktop systems (Mirial Softphone and PVX), the video showed occasional errors. Therefore, the quality was only rated good. The maximum video resolution is 1280 x 720 pixels, which are transmitted at 30 fps. This peak was only reached in both directions when connected with TANDBERG C40.

A connection to TANDBERG Movi could not be established. After initiating the call, the connection was held for about 3 seconds, then closed automatically. Afterwards, the system RADVISION VC240 rebooted automatically.

The quality of audio connections was always very good in both directions. By default, G.722 was used as codec. G.711 was only used in conferences with Mirial Softphone.

**H.239**

In the area of data presentations there is still room for improvement. Establishing the second channel according to H.239 leads to a reduction of the video channel's bandwidth, which often results in a lower resolution. Approximately 500 kbps are used for data transmission, video and audio content is transmitted via the remaining 1500 kbps.

Transmitting presentations with static content worked without major errors. The compensation of disturbing signals is limited due to the small bandwidth. This can lead to a transmission failure when the load of the slides is very high.

The presentation of moving content is not feasible reasonably with a standard frame rate of 2 fps. This value was negotiated in all tests for both directions short of the following exceptions. When receiving H.239 from a TANDBERG C40 or a LifeSize Room, the transmission of SD and HD films in an acceptable quality on the part of the VC240 was possible because of a frame rate of 7-9 fps.
REMOTE CONTROL

Remote controlling the camera is not possible in both directions. Neither the interface nor the remote control of the VC 240 provide any controls to control the remote side’s camera.

MCU

Collaboration with the Codian MCU in the realm of the service DFNVideoConference worked faultlessly up to the maximum bandwidth for both devices and in very good quality. Data presentation was transmitted with 2 fps, which is acceptable for slides, but not practically usable for films.

GATEKEEPERS

Collaboration with the gatekeepers GNU-GK 2.0.7 and CISCO MCM worked faultlessly and stable. Registering with the devices always worked.

MISCELLANEOUS

SIP calls to the DFN MCU work faultlessly. However, calls according to H.323, Annex O (URI dialling) are neither possible with activated nor with deactivated gatekeeper registration. Encryption according to H.235 has not been implemented yet in the tested versions. According to the manufacturer it will be included in a software release soon.

CONCLUSION

The system RADVISION is a well-designed office system with a good price-performance ratio, which can be easily integrated into an existing office environment. It is possible to use it as a PC monitor and for video conferences. The quality of audio and video transmissions is always very good.

However, for the use at universities, it is still very important to introduce encryption. Furthermore it would be favourable to increase the capacity of the data channel.

DOCUMENTATION

We thank the enterprises RADVISION and Klengel Consult Dresden for providing the test components.

Manufacturer: RADVISION
Distributor: Klengel Consult GmbH - Dresden

**Supported General Standards**
- H.323, SIP, H.239

**Audio Codings**
- G.711, G.722, G.722.1, G.729

**Video Compression**
- H.263, H.264, H264 SVC

**Bandwidth**
- IP up to 2 Mbps