

VTAS - MANUFACTURER RESPONSE

Huawei TE30

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1. Presentation Frame Rate

During the evaluation in calls up to 4Mbit/s with the video and H.239 protocols set to Auto and using the advanced settings for Video and Presentation Resolution the presentation frame rates described on the data sheet "Dual Stream: Dual 1080p (Optional); Dual 720p@30" were unobtainable. The resolutions and frame rates experienced were:

	<i>Sharp</i>	<i>Smooth</i>
<i>Main Channel</i>	<i>1080p @30</i>	<i>720p @60</i>
<i>Presentation Channel</i>	<i>1080p @4</i>	<i>4CIF @22</i>

While the quality of the Presentation Channel image at 1080p @4fps was excellent for static images is was very poor for moving images. 4CIF @22fps was acceptable for full frame moving images but very poor for PC desktop images with embedded video.

If the Video and H.239 protocols are pre-selected then additional resolution options are offered. During these detailed tests the highest HD presentation resolution and frame rate experienced was 720p @10fps.

H.264 BP

	<i>Menu Setting</i>	<i>Conference Statistics</i>
<i>Video</i>	<i>720p @25/30</i>	<i>720p @30</i>
<i>H.239 Presentation</i>	<i>720p @25/30</i>	<i>720p @10</i>
<i>Video</i>	<i>720p @50/60</i>	<i>720p @60</i>
<i>H.239 Presentation</i>	<i>720p @50/60</i>	<i>4CIF @22</i>
<i>Video</i>	<i>1080p @25/30</i>	<i>1080p @30</i>
<i>H.239 Presentation</i>	<i>1080p @25/30</i>	<i>1080p @3</i>

H.264 HP

	<i>Menu Setting</i>	<i>Conference Statistics</i>
<i>Video</i>	<i>720p @25/30</i>	<i>720p @30</i>

<i>H.239 Presentation</i>	<i>720p @25/30</i>	<i>1080p @4</i>
<i>Video</i>	<i>720p @50/60</i>	<i>720p @60</i>
<i>H.239 Presentation</i>	<i>720p @50/60</i>	<i>1080p @4</i>
<i>Video</i>	<i>1080p @25/30</i>	<i>1080p @30</i>
<i>H.239 Presentation</i>	<i>1080p @25/30</i>	<i>1080p @4</i>

H.264 SVC

	<i>Menu Setting</i>	<i>Conference Statistics</i>
<i>Video</i>	<i>720p @25/30</i>	<i>720p @30</i>
<i>H.239 Presentation</i>	<i>720p @25/30</i>	<i>720p @10</i>
<i>Video</i>	<i>720p @50/60</i>	<i>720p @60</i>
<i>H.239 Presentation</i>	<i>720p @50/60</i>	<i>4CIF @22</i>
<i>Video</i>	<i>1080p @25/30</i>	<i>1080p @30</i>
<i>H.239 Presentation</i>	<i>1080p @25/30</i>	<i>1080p @4</i>

Huawei:

TE30 is able to be set as Dual 720p@30 by the right configuration. If you do the configuration as follows, the Dual 720p will work as described.

The presentation bandwidth setting should be MANUAL, and percentage should be 50%. Most of the products in the market are supporting H.264BP, so the integration with others with this configuration should be fine.

Audio protocol	Auto
Video protocol	H.264BP
Video resolution	720p 25/30 Hz
Video frame rate	30 fps
Prevent little packet loss	Disable
Presentation	Enable
Presentation protocol	H.264BP
Presentation resolution	720p 25/30 Hz
Presentation bandwidth setting	Manual
Presentation bandwidth (%)	50
Presentation plug-and-share	Disable
Dynamic bandwidth	Disable
Conference bandwidth	Normal
Conference line type	Auto
Preferred IP protocol	H.323

Default Save

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2. Camera Focus

At times the camera appeared to have difficulty in achieving focus, the participant in the centre of the frame appeared to continually go in and out of focus or at times the focus settled on the background behind the participant.

Huawei:

Huawei is continuously improving the focusing capability of the camera and the experience of participants with software upgrades. The situation of camera focus will improve in the next release TE30 V100R001C01B013SP11.

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3. Audio Performance

On establishing a call it took a few seconds for the echo canceller to train and eliminate any echo. Moving the camera during a conference had two detrimental effects on the audio quality of the link, it impacted on the echo cancellation and therefore when the remote site was talking they experienced

slight echo while the system retrained to compensate for the movement of the camera microphones, in addition noise suppression appeared to be applied to the audio picked up by the microphones to compensate for the noise of the camera movement, thus distorting the participants audio. In addition at times the Lip Sync appeared to drift to an unacceptable amount, this could only be rectified by reconnecting the call.

Huawei:

The echo does exist, so we suggest fixing TE30 on top of the screen for the best experience. However, the new release TE30 V100R001C01B013SP11 also improves to weaken the effects of echoes.

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4. Remote Control

At times the system appeared to hang and while the system lights indicated that it was receiving signals from the remote control it did not respond to the remote control or the web interface, a reboot was required to regain remote control.

Huawei:

It is a known issue that the new release TE30 V100R001C01B013SP11 will fix.

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5. H.239 Interoperability

In general the TE30 transmitted 720p at low frame rate 3-12fps to the other vendors systems, in addition it negotiated low resolution for example 4CIF, 448p, 640x360 at high frame rate 15-30fps received from the other vendors systems.

Huawei:

In the HQ lab, the integration with other vendors systems work well, including Cisco SX20, C40, C60, C90 and Tandberg 6000 MXP, even with the high resolution 1080p.