FUJITSU Network
Real-time Video Transmission Gear IP-9610

IP-9610 is a Video Transmission Equipment adopted highly efficient video encoding technology, “H.264” to perform live transmission of high fidelity HDTV at low bit-rates.

IP-9610 achieves video compression supported 1080p and 10 bit 4:2:2 color format. Using 1U chassis, IP-9610 can compress and distribute 2-channel video.

Features

**4 : 2 : 2 Color Format**
Supports 10 bit 4:2:2 color format and achieves video compressing by H.264 High422 profile. IP-9610 succeeds Fujitsu’s high spec chroma-scalable coded CSC4:2:2 adopted in IP-9500, which can be received with existing 4:2:0 decoder.

**3G Video Input**
Supports 1080p, 3G-SDI input/output, and Dual-Link SDI. These enable to provide video fidelity to the source especially for high-speed movement video with high resolution.

**Ultra Low Latency**
In addition to “Low Latency” mode, “Ultra Low Latency” mode as a new option of IP-9610 is enabled less than 99ms with H.264 IP transmission among Encoders/Decoders.

**NIT (Carrier ID)**
Video can be smoothly transmitted using NIT over Satellite Network. This feature is suitable for global video transmission among plural countries.

**Multiple Programs**
Synchronizes 2ch’s video as MPTS, enables to output from ASI. You can apply for 3D video distribution and concurrent sending of multiple programs.

**Multi-Audio**
Supports various audio encoding (MPEG-1, AAC, HE-AAC). This enables audio distribution for multiple numbers of channels such as maximum 16 channels per 1 video channel.

**Robust Error Correction**
Assembles Fujitsu Proprietary FEC (Forward Error Correction)/ARQ (Automatic Repeat Request) proven at existing Fujitsu IP series equipment and “SMPTE2022 (Pro-MPEG) FEC” of industry-standard, this offers powerful network error correction.

**Flexible Module Structure**
Flexible module structure enables to choose available function customer needs.
# Specifications

## Video

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<th>Items</th>
<th>Specification</th>
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<td>SDI Input board/Encoder</td>
<td>1 x 3G/HD/SD-SDI Input (SMPTE 424M/292M/259M) ※Support Dual-Link SDI (SMPTE 372M) using 2 boards</td>
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<tr>
<td>SDI Output board/Decoder</td>
<td>2 x 3G/HD-SDI SDI Output (SMPTE 424M/292M/259M) ※Support Dual-Link SDI (SMPTE 372M) using 2 boards</td>
</tr>
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</table>

## Coding

- ITU-T H.264/MPEG-4 AVC (ISO/IEC 14496-10)
- High422@L4.2, HP@L4, High422@L3, HP@L3, CSC422

## Resolution, Frequency, Bit Rate

- 1080p x 1920/1440/960 (50/59.94/60Hz)
- 1080i x 1920/1440/960 (50/59.94/60Hz)
- 720p x 1280/960/640 (50/59.94/60Hz)
- 480i x 720/352 (59.94Hz), 576i x 720/352 (50Hz)

## Reference

- 1 x Reference Input (Tri-sync/Bi-sync) ※Decoder’s function
- 1 x Reference Output (Decoder Synchronization) ※Decoder’s function

## Audio

### SDI Input Board/Encoder

- 1 x SDI Embedded Input (SMPTE 299M/272M)
- 1 x SDI Embedded Output (Loop-thru)

### SDI Output Board/Decoder

- 2 x SDI Embedded Output (SMPTE 299M/272M)

### Coding (16ch)

- MPEG-1 Layer2 (Mono, Dual mono, Stereo)
- MPEG-2/4 AAC, MPEG-4 HE-AAC V1 (Mono, Dual mono, Stereo, 5.1ch)
- Pass-thru (SMPTE-302M, AC-3/ATSC, AC-3/DVB)

## Intercom

- 1 x Input/Output: G.711

## Multiplexing Method

- Single Unit: 1 x MPEG-2 TS/MPEG-2 TTS
- Multi Unit: 2 x MPEG-2 TS/MPEG-2 TTS (SPTS/MPTS)

## Ancillary Data

- Private PES (SMPTE RDD 11-2007), DID/SDID filtering, ATSC Annex F (Closed Caption)
- NIT (Carrier ID), SDT

## AUX Data

- 2 x RS-232C/RS-422 Pass-thru

## Console

- 1 x 10BASE-T/100BASE-TX/1000BASE-T
- IPv4/IPv6, http, SNMP, SNTP, RTP, UDP

## Error Correction

- SMpte2022 (Pro-MPEG) FEC, Fujitsu FEC & ARQ

## DVB-ASI

- Interface 2 x DVB-ASI Output
- 1 x DVB-ASI Input

## Encryption

- BISS mode 1/ mode E

## Control

- VFD Key (up, down, left, right, enter, cancel, 4 x function-key), Web-GUI, SNMP

## External Dimensions (W x D x H)

- 425 x 500 x 43 mm

## Weight

- Approx. 7.0kg

## Power

- AC 100 ~ 240 V
- Power Consumption 100 ~ 170 VA (Depends on the structure)

## Temperature

- 0 ~ 50 degrees C

## Humidity

- 20 ~ 90RH (No condensations)

## Compliance

- UL, CE, FCC, RoHS, KC

*1: Need “3G Option”  
*2: Up to 2 boards can be installed  
*3: Decoder’s function  
*4: Need two of “Encoder license “or” Decoder License”  
*5: Need “AAC Encode Option” at Encoder  
*6: Need “BISS scrambler Option” at Encoder

## Front Panel

- The specifications are subject to change without notice.

## Rear Panel

![Rear Panel Image]

## Contact

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