

~ Real-Time High Fidelity HDTV Content Transmission ~

# IP-9610

## H.264/AVC Codec Supporting 10 bit 4:2:2

Fujitsu brand new codec IP-9610 achieves video compression supported 1080p and 10 bit 4:2:2 color format with Fujitsu developed original ASIC. Using 1U chassis can compress and distribute 2 channel's video. Flexible module structure enables to choose available function customer needs.



### 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

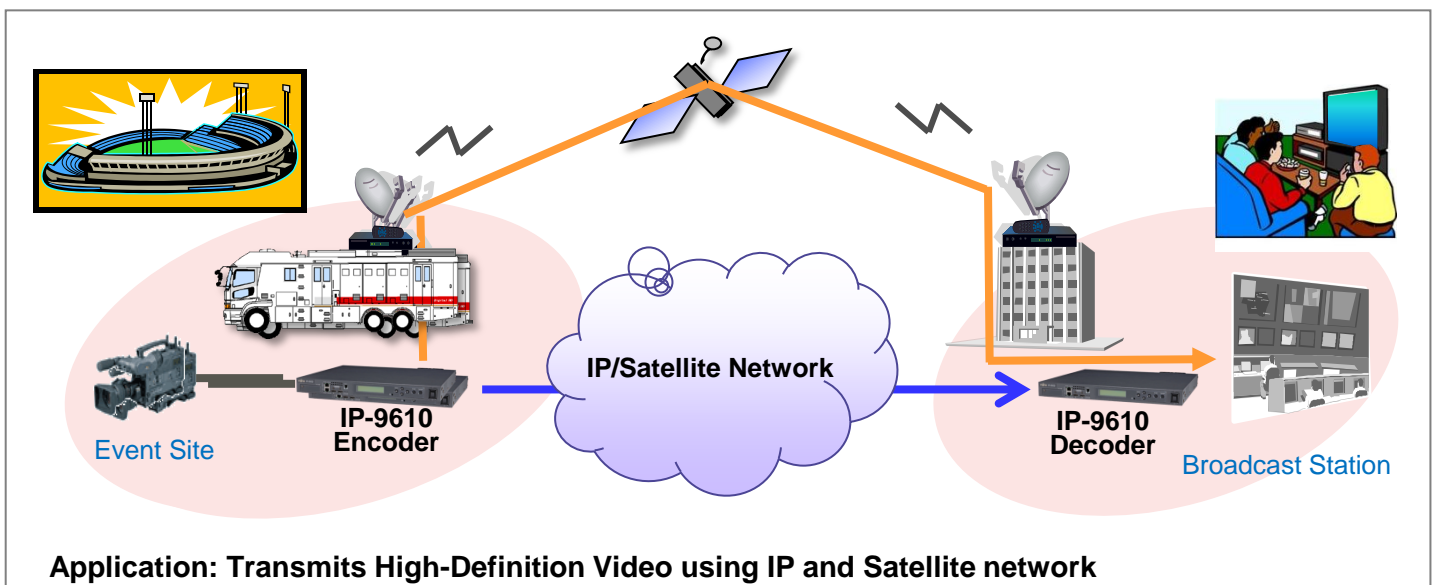
Supports various audio encoding (MPEG-1, AAC, HE-AAC). This enables audio distribution for multiple numbers of channels such as maximum 16 channels per 1 video channel.

#### Robust Error Correction

Assembles Fujitsu Proprietary FEC (Forward Error Correction) /ARQ (Automatic Repeat and "SMPTE2022 (Pro-MPEG) FEC" of industry-standard, this offers powerful network error correction.

#### Easy Operation

Operator achieves easy operation and control using front panel and Web access. 4 function keys of front panel are available for customers to assign a shortcut to their any item screen.



# Specifications

Items		Specification
Video	SDI Input board/Encoder <sup>*2</sup>	1 x 3G <sup>*1</sup> /HD/SD-SDI Input (SMPTE 424M/292M/259M) 1 x 3G <sup>*1</sup> /HD/SD-SDI Output (Loop-thru) ※Support Dual-Link SDI (SMPTE 372M) using 2 boards
	SDI Output board/Decoder <sup>*2</sup>	2 x 3G/HD/SD-SDI Output(SMPTE 424M/292M/259M) ※Support Dual-Link SDI (SMPTE 372M) using 2 boards
	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) <sup>*1</sup> 1 - 100Mb/s 1080i x 1920/1440/960 (50/59.94/60Hz) 1 - 100Mb/s 720p x 1280/960/640 (50/59.94/60Hz) 0.5 - 100Mb/s 480i x 720/352 (59.94Hz), 576i x 720/352 (50Hz) 0.15 - 100Mb/s
	Reference	1 x Reference Input (Tri-sync/Bi-sync) <sup>*3</sup> 1 x Reference Output (Decoder Synchronization) <sup>*3</sup>
Audio	SDI Input Board/Encoder <sup>*2</sup>	1 x SDI Embedded Input (SMPTE 299M/272M) 1 x SDI Embedded Output (Loop-thru)
	SDI Output Board/Decoder <sup>*2</sup>	2 x SDI Embedded Output (SMPTE 299M/272M)
	Coding (16ch)	MPEG-1 Layer2 (Mono, Dual mono, Stereo) MPEG-2/4 AAC <sup>*4</sup> , MPEG-4 HE-AAC V1 <sup>*4</sup> (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		1 x MPEG-2 TS/MPEG-2 TTS, 2 x MPEG-2 TS/MPEG-2 TTS <sup>*5</sup> (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
LAN	Interface	2 x 10BASE-T/100BASE-TX/1000BASE-T
	Protocol	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 <sup>*3</sup>
	Encryption	BISS mode 1/ mode E <sup>*6</sup>
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 "AAC Encode Option" at Encoder

\*5: Need "Codec Board"

\*6: Need "BISS scrambler Option" at Encoder

※3G input supports "Level-A/B" and 3G output supports "Level-A"

● The specifications are subject to change without notice.

## Front Panel



## Rear Panel



**Green Policy Innovation**

**Green Product**

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