

# FUJITSU Network Real-time Video Transmission Gear IP-920

IP-920 is a Video Transmission Equipment adopted highly efficient video encoding technology, "H.264" to perform live transmission of high fidelity SDTV and HDTV at low bit-rates. IP-920 supports balanced analog audio for professional legacy equipment users.  
 IP-920E: Encoder      IP-920D:Decoder



## Features

### Best-in-Class Video Fidelity

Applying the latest MPEG-4 AVC (H.264) compression tools and image processing algorithms, it provides best-in-class video fidelity. High Profile @ Level 4 encoding provides high video fidelity for use over enterprise network

### Compact, Light and Half Width

Compact (1RU and 210mmW) and rugged construction enable you to use in remote sites which is demanded SDTV and HDTV video .

### Support Balanced Analog Audio

IP-920E supports balanced audio interface instead of unbalanced audio IP-900 supported. XLR-3 connector is used for legacy analog, audio equipment for broadcast can be connected via attached

### Low Latency

IP-920 has "Low Latency Mode" as one of settings and has implemented less than 400ms with H.264 IP transmission among Encoder/Decoder.

### Ultra Low Latency

In addition to "Low Latency" mode, "Ultra Low Latency" mode as a new option of IP-920 is enabled less than 99ms with H.264 IP transmission among Encoders/Decoders.

### NIT (Carrier ID)

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

### Multiple Interfaces

- SD-SDI/HD-SDI
- NTSC/PAL (Video Input/ Output)
- HDMI
- Balanced analog audio

### Archiving and File Transfer

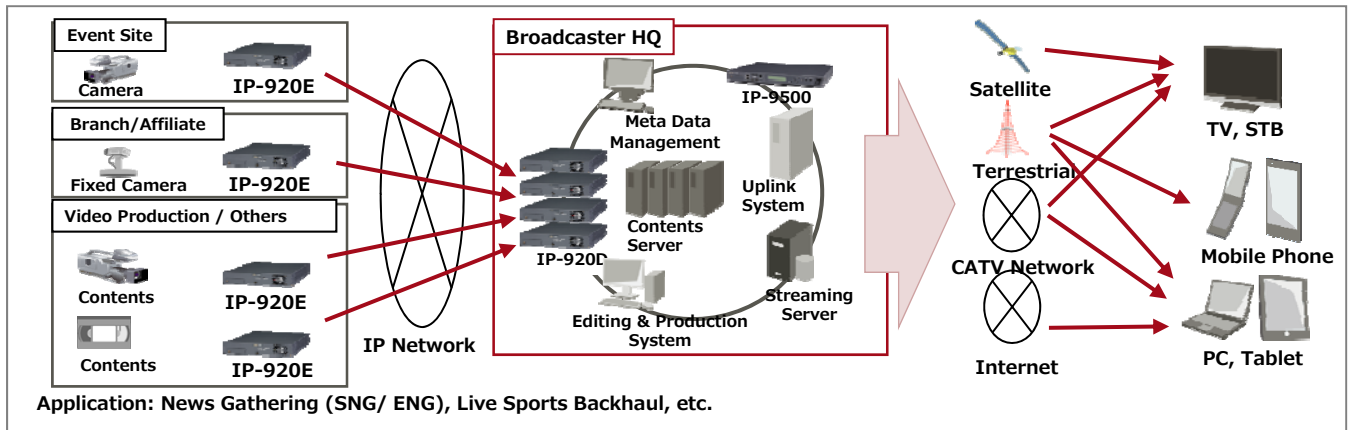
Encoded video and audio data can be recorded in encoder, then downloaded remotely from the network operation center whenever you need it. Even if the network is thin, high fidelity video can be transferred to designated point.  
 - 16GB internal storage (optional).

### Robust Error Correction (FEC/ARQ)

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

### Other Features

- Dual encoder (2 types of bit rate encoding)
- Superimpose (text and time)
- RS-232C (pass-thru) - NIT (Carrier ID)



## Specifications

Items		Specification	
		IP-920E (Encoder)	IP-920D (Decoder)
Video	Input / Output	1 x HD-SDI(SMPTE 292M) *1/ SD-SDI(SMPTE 259M), 1 x HDMI, 1 x NTSC/PAL	1 x HD-SDI(SMPTE 292M)/ SD-SDI(SMPTE 259M), 1 x HDMI, 1 x NTSC/PAL
	Coding	ITU-T H.264/MPEG-4 AVC (ISO/IEC 14496-10) HP@L4 *1, MP@L4 *1 ITU-T H.264/MPEG-4 AVC (ISO/IEC 14496-10) HP@L3, MP@L3	
	Resolution, Frequency, Bit Rate	1080i x 1920/1440/960 (50/59.94Hz) : 0.5-27Mbps, 720p x 1280/960/640 (50/59.94Hz), 720p x 1280 (25/29.97Hz)*5 : 0.5-27Mbps 480i x 720/352 (59.94Hz), 576i x 720/352 (50Hz) : 150kbps-10Mbps 240i x 352 (59.94/29.97Hz), 288i x 352 (50/25Hz) : 25kbps-1Mbps	
	GOP	Closed GOP/Open GOP	
	Reference	----	1 x Reference Input (BB)*5
Audio	Input / Output	2 x SDI embedded*3 (SMPTE 299M*1/272M), 1 x HDMI, 1x Balanced Analog pair (D-Sub 9 pin*4)	1 x SDI embedded (SMPTE 299M/272M), 1 x HDMI, 1x Balanced Analog pair (D-Sub 9 pin*4)
	Coding	MPEG-1 Layer2 (ISO/IEC 11172-3) : 2ch (2 x Stereo) 128,256,384kbps/Stereo MPEG-2 AAC (ISO/IEC 13818-7) : 2ch (2 x Stereo) 56,64,128,256,384kbps/Stereo	
Multiplexing Method		MPEG-2 TTS, MPEG-2 TS	
Ancillary Data		NIT (Carrier ID), SDT	
Transport		RTP/UDP/IP, UDP/IP	
Error correction		Fujitsu FEC and ARQ, SMPTE 2022-1 (Pro-MPEG FEC)	
Network	IPv4	PPPoE, DHCP, SNTP, SNMP v1/SNMP v2c, IGMP v3	
	IPv6	SNTP, SNMP v2c, MLDv2	
Control		Web GUI, SNMP	
Additional functions		Recoding*2, Dual encoder, Superimpose	----
Network interface		1 x 10BASE-T/100BASE-TX	
Data (outside MUX.)		RS-232C (Pass-thru)	
External Dimensions (W x D x H)		210 x 300 x 42 mm (w/o protrusions)	
Weight		Approx. 2 kg	
Power		100 ~ 240 V (AC) / +12 ~ 24V (DC)	
Power Consumption		38VA (AC) / Max. 38.4W (DC)	35VA
Temperature		-10 ~ 55 degrees C	
Humidity		20 ~ 90RH (No condensations)	
Compliance		UL, CE, FCC, RoHS (AC, DC) KC (AC) / Class III device of IEC60950-1, UL60950-1, EN60950-1 (DC)	

\*1: IP-920E with HD option software, IP-920D \*2: Need Optional CF card \*3:Selectable 2ch (2 x Stereo) mode (Single Encoder) or 1ch (1 x Stereo) mode (Dual Encoder) \*4: Connector conversion cable is attached \*5: Decoder's function

Note) HDMI, the HDMI Logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.



● The specifications are subject to change without notice.

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