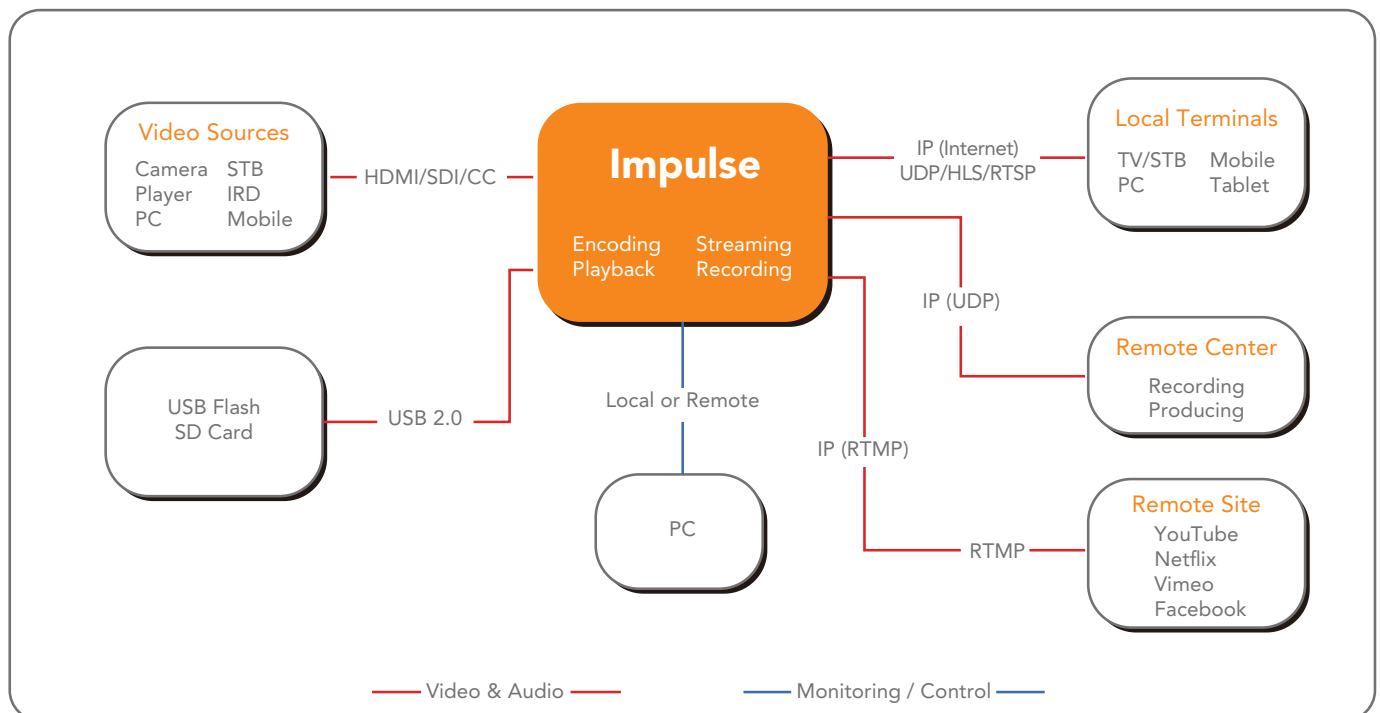




## INTRODUCTION

Impulse is a single-channel encoder/streamer for audio and video processing in a cost-effective way. It supports professional encoding and IP streaming for live encoding & uploading, channel insertion, live broadcasting, AD/local program playback/streaming, remote meeting, digital signage and so on. In addition, Impulse also has the ability of streaming and recording live video in the same time, which is believed to fit into more scenarios in the age of efficiency.

## TYPICAL APPLICATION



## SPECIFICATIONS

Channels	
Video	1 channel of H.264 or H.265 SD/HD program encoding
Audio	1 pair of MPEG1L2, AAC or AC3 (optional) audio
Physical Interfaces	
Input	1 x HDMI 1 x CVBS (3.5mm) for CC input 1 x SDI (option) 1 x audio interface (3.5mm) 1 x serial port (3.5mm)
Output	1 x RJ45 1 x HDMI
Other I/O	1 x USB 2.0, 1 x SD card standard interface LCD x 1, front button x 6, reset button x 1

Encoding	
H.264	BP/MP/HP@L5.1
H.265	MP@L5.1
Resolution	Input: 1920×1080@60p/50p/30p/25p, 1920×1080@60i/50i, 1280×720@60p/50p, 720×576@50i, 720×480@60i and etc. Output: 1920×1080@60p/50p/30p/25p, 1920×1080@60i/50i, 1280×720@60p/50p, 720×576@50i, 720×480@60i, 704×576@30p/60i, 640×480@30p/60i, 640×360@30p/60i and etc.
Video Bit-rate	1~12Mbps
Closed Caption	Support
Rate Control	CBR/VBR
GOP Control	Support
Aspect Ratio	Automatic or manual (4:3 or 16:9)
Audio Profile	MPEG-1 Layer II, AAC (HE/LC), AC3 (optional)
Audio Bit-Rate	MPEG-1 Layer II: 64~384Kbps AC-3: 128~448Kbps AAC: 32~448Kbps
Audio Mode	Stereo (2.0, including down-mix)
Audio Sampling Rate	48KHz
Audio Volume Leveling	-12~12dB

Streaming	
Protocols	Live: UDP, RTSP, RTMP, HLS
Server Mode	Direct streaming to connected audience RJ45, limited accessing numbers
Operating Modes	
Live	Encoding and IP streaming
Recording	Local: USB flash, SD card Format: TS, MOV/MP4 Circling recording (by time or size of file)
Playback	Local: USB flash, SD card Format: TS, MOV, MP4 In-order, random, scheduled playlist IP or HDMI output

Management	
Configuration	Web-GUI (easy or advanced mode) or front panel Power-on and play (by pre-setup or last configuration)
Status/Monitoring	LCD display of status Remote monitoring of status and current program
Physical & Environment	
Dimensions	144 x118 x 38mm 0.3kg (0.66lb)
Power	12V DC port x 1 Max. 9W
Operating Temperature	10~40°C

## ORDER INFORMATION

Model	Description
NB200E-00	HDMI in, CVBS in (cc), HDMI out, IP out, supports MPEG1L2, AAC, AC3 (optional)
NB200E-01	HDMI in, CVBS in (cc), SDI in, HDMI out, IP out, supports MPEG1L2, AAC, AC3 (optional)