

# WISI FIREFLY GBA02S2S2

HLS Streaming IRD and Decoder. Up to 2 HLS receiver, up to 4 SD-SDI or up to 2 HD-SDI outputs



**ELPAS**



## Description

FIREFLY HLS Receiver and Decoder is a Smart Broadcast Platform. The FIREFLY HLS Receiver has been developed specifically to provide an alternative content contribution method. This smart receiver and decoder can convert HLS streams to baseband-SDI signal, and provides a cost-effective solution for operators who wish to distribute linear TV channels to each sub headend. The FIREFLY HLS receiver and decoder model GBA02S2S2 allows you to receive up to 2 HLS streams, processing, decoding of up to 4 SD-SDI outputs or up to 2 HD-SDI outputs.

## Scope of delivery

- 1x GBA02S2S2
- 1x Quick Guide

## At a glance:

- Professional integrated HLS receiver and decoder
- Single or dual HLS stream reception, up to 2 HD sources with 1 profile each or up to 2 SD sources with 1 profile each
- Conversion of HLS to IP Multicast/Unicast streams
- Integrated decoder. Up to 2 SD-SDI outputs or 2 HD-SD outputs
- Intuitive graphical user interface
- Output interface: IP or ASI
- Deployment Scenarios: satellite distribution replacement, hospitality and cable operators, refugees TV, universities

# WISI FIREFLY GBA02S2S2

Technical data	
<b>HLS Streaming Input</b>	
HLS IRD	Up to 2 HLS streams
HLS SD bitrate	Up to 4 Mbps per stream
HLS HD bitrate	Up to 8 Mbps per stream
HLS Adaptive Bitrate (ABR)	No (optional)
<b>Streaming- In-/Output</b>	
IP-Inputs	32 pcs.
IP-Outputs	32 pcs.
IP-Compliance	ISO/IEC 13818
IP-Input bitrate	Max. 425 Mbit/s per IPTS, Max. 850 Mbit/s total
IP-Output bitrate	Max. 425 Mbit/s per IPTS, Max. 850 Mbit/s total
IP-Input protocol	UDP/RTP/RTP+FEC Unicast and Multicast, IGMP v2 and v3
IP-Output protocol	UDP/RTP/RTP+FEC Unicast and Multicast, IGMP v2 and v3
IP-TS-Input format	SPTS CBR/VBR, MPTS CBR
IP-TS-Output format	SPTS CBR/VBR, MPTS CBR
IP-FEC Inputs	32 pcs.
IP-FEC Outputs	32 pcs.
IP-FEC compliance	SMPTE 2022-1, SMPTE 2022-2
IP-Packet format	MPEG over UDP/IP and RTP/IP
IP-Packet size	188 Byte
IP-PCR restamping	Yes
IP-Dejittering	Yes, per default 100ms, individual adjustable
<b>ASI Input/Output</b>	
ASI-Input/Output	2 pcs. (max.)
ASI-Impedance	75 Ω
ASI-Frequency range	<270 MHz
ASI-Return loss	>17 dB (27...270 MHz)
ASI-Compliance	EN 50083-9:2002
ASI-Packet size Input/Output	188, 204/188 Byte
ASI-PCR restamping	Yes
ASI-Input/Output max. payload bit rate	Typ. 200 Mbit/s
<b>HD-SDI Output</b>	
Number of outputs	2 pcs.
Video formats	1920x1080i@50/60, 1280x720p@50/60
Stereo mode	Stereo, Dual mono, Dual left/right
OSD Test pattern	Yes
Audio sampling frequency	32/44, 1/48 kHz
Compliance SDI-HD	SMPTE 292M, SMPTE 299M, SMPTE 291
Connector	BNC connector 3 and/or 5
<b>SD-SDI Output</b>	
Number of outputs	4 pcs.
Video formats	720x576i@50, 720x480i@59.94
Connector	BNC connector 3-6
<b>MPEG Decoder - Video/Audio</b>	
Video decoder	MPEG-2 SD (MP@ML) 1,5..15 MBit/s, MPEG-4 SD (MP@ML) Level 4.1, MPEG-4 HD (MP@HL) Level 4.1

Technical data	
Audio decoder	ISO 13818-3 MPEG-1 (L1/L2) MPEG-2 (L1/L2), Dolby AC-3 (Dolby and the double-D symbol are trademarks of Dolby Laboratories. Manufactured under license from Dolby Laboratories)
Video downscaling	HD to SD for up to 2 service
Video-Scaling	Auto, Ignore, Letterbox, Pan and scan, Combined, Forced
Subtitle	DVB and Teletext (EBU) EN 300 743, SCTE 27
Audio format	Mono/Stereo/Dual NICAM mono/ BTSC/SAP/A2 Stereo/A2 Dual mono, AC-3
Compliance SDI-SD	ISO 13818-2 (MPEG-2/H.262); ISO 14496-10 (MPEG-4/H.264/ AVC)
<b>Processing</b>	
Service remultiplexing	Yes
PID filtering and remapping	Yes
PCR correction and de-jitter	Yes
Advanced PSI/SI regeneration	Yes
Processing bitrate	max. 850 Mbps total
Number of PIDs	Max. 2000 PIDs total
Compliance	ETSI EN 300 468
<b>Connectors</b>	
RJ45	3 pcs. (1x Management, 2x Streaming)
BNC-socket	6 pcs.
<b>General data</b>	
Power consumption	20 W
Power supply	Redundant power supply, internal, 90...260 V, 47...63 Hz
Operating temperature range	-5°C...+45°C, 23°F...113°F, (ETSI EN 300 019-1-3 Class 3.1)
Max. humidity, non condensing	95 %
Electro Magnetic Compatibility (EMC)	EN 50083-2
Safety compliance	CE
Signalling	Multicolor LEDs (Power on - green, Error - red)
Hardware revision	1000
Software version	-
<b>Packaging data</b>	
Sales unit	1 pcs.
Dimensions (WxHxD) sales unit	483 x 45 x 410 mm (1HE, 19"-Rack)
Shipping unit	1 pcs.
Dimensions (WxHxD) shipping unit	570 x 100 x 550 mm
Packaging volume shipping package	31,35 dm <sup>3</sup>