

HD/SD-SDI Distribution Amplifier with Hyperion™ Content Monitoring

The IQSDA02 is an HD/SD-SDI distribution amplifier with revolutionary Hyperion content QC capability. Hyperion is designed to continuously and automatically monitor signal content providing verification of whether legal and technical obligations are being met and to provide guidance as to whether the content is within the required parameters to be considered as valid. For video factors such as motion level within the content, the amount of darkness and amount of picture color are monitored. For audio factors including Dolby D/E or PCM audio presence, likeness and level information such as silent, quiet, loud and overload are reported.

Picture regions can be monitored to allow for animated logos and onscreen graphics such as crawls. Alarm thresholds can all be adjusted allowing profiles to be set by the user for different material types (genres). Content may be tracked through the broadcast chain by the insertion and reading of SMPTE UMIDs or Internal House Number, title and duration metadata. This data can be used to track content, verify that the correct content is being transmitted and even frame count the duration of every piece of content to ensure contractual obligations are being met.

For remote content identification, delivery of video thumbnail images and audio level monitoring provide a secondary manual level of confidence that content is correct at both internal and remote locations.

All alarms from this product can be integrated into the major Video display wall processors to streamline alarm reporting and reported through RollMap Infrastructure Management system or via SNMP to other vendor Control & Monitoring systems.

Does this module suit your application?

- Intelligent HD-SDI and SD-SDI re-clocking distribution amplifier with integrated Hyperion QC monitoring
- Automated content QC, suited to:
 - Multi-channel playout facilities and complimentary monitoring of high value content
 - Automated ingest processes including timecode logging for accurate location of Hyperion alarms
 - Remote location monitoring such as business continuity sites and unmanned teleport facilities
- Real Time content QC against genre profiles ensure any on air issues are identified with minimal potential impact on revenue, such as scheduling errors or dropped frames on commercial content
- Remote monitoring over TCP/IP via video Thumbnails
- Legal & Technical validation of signal including detection and reporting of closed captions, content advisory rating, XDS Program data
- Automated ingest QC significantly increases throughput efficiency over manual QC processes

- Distribute low cost Hyperion QC capability throughout your facilities by deploying the IQSDA02 as your standard DA technology
- Useful for critical installation thanks to outstanding input equalization capability of up to 140 m at 1.5 Gbit/s and up to 350 m at 270 Mbit/s of Belden 1694A cable
- Standards supported:
 - 625/50, 525/59
 - 720/50p, 1080/25i
 - 720/59p, 1080/29i
- Can be used for current SD systems that will later upgrade to HD

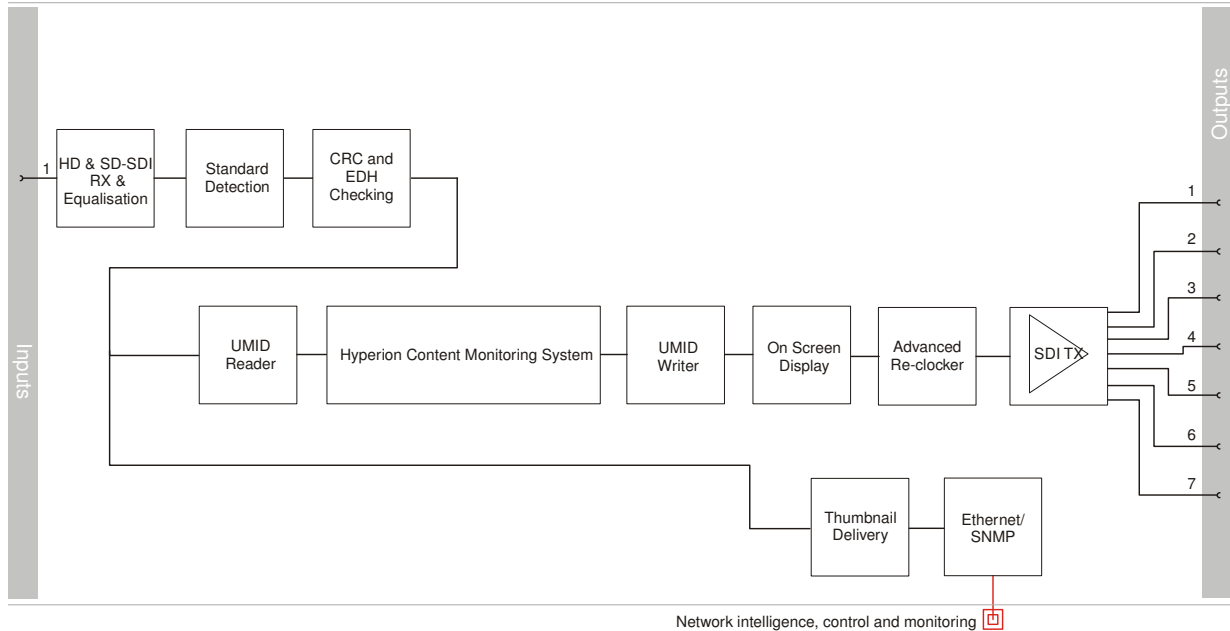
Why should you choose this module?

- Sophisticated Hyperion content quality management tools allow true assessment of the value of the signal, not just presence, ideal for unmanned and low-manning operations
- Reporting of all detected alarms via RollMap Infrastructure Management System or via SNMP to other vendor control and automation systems
- Hyperion alarm data integrates with all major Video display wall processors to streamline alarm reporting in playout facilities

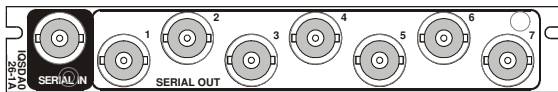
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IQSDA02

HD/SD-SDI Distribution Amplifier with Hyperion™ Content Monitoring



Order codes for IQH3A enclosures



IQSDA0226-1A HD/SD-SDI Distribution Amplifier with Hyperion Content Monitoring, 7 outputs.

For more details on enclosure types please refer to the Frames/Enclosures section

Inputs & Outputs

Signal Input

Electrical 1.5Gbit/s HD-SDI, SMPTE 292M
 270 Mbit/s SDI, SMPTE 259M-C

Connector / Format..... BNC/ 75ohm panel jack on
 standard S&W connector panel

Input Cable Length..... Up to 140m Belden 1694A @
 1.5 Gbit/s
 Up to 350m Belden 1694A @
 270 Mbit/s

Return loss > -15dB

Signal Outputs

Electrical 1.5 Gbit/s HD-SDI, SMPTE 292M
 270 Mbit/s SDI, SMPTE 259M-C

Connector / Format..... BNC/ 75ohm panel jack on
 standard S&W connector panel

HD / SD-SDI Outputs x 7

Return loss..... > -15dB

Specifications

Electrical

Standards supported: 625/50, 525/59
 1080/25i, 1080/29i,
 720/50p, 720/59p

Power Consumption

Module Power Consumption
 7 W Max

IQSDA02

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Controls

Indicators

Power OK (Green)
CPU OK (Flashing)
FPGA OK (Flashing)
Content Status Summary OK (Green)
Warning (Yellow)
Error (Red)

Functions

Video..... Video Thumbnails over TCP/IP
Motion Level (Stillish)
Picture Darkness (Blackish)
CRC/EDH Reporting
Average Picture Level
Luma High/Low
Chroma High/Low
Chroma/Luma Underflow
Video Bit Depth
Black
Input Status
Input Standard
Freeze Detect

Audio Audio Presence
Audio Type Detection (PCM, Non-PCM, Dolby E, AC3, MPEG Audio (SMPTE 338M)
Audio Bit Depth
Audio Level Metering
Audio Silence
Audio Quiet
Audio Loud
Audio Overload
Audio Out of Phase (Polarity)
Audio Mono/Stereo Detection

Metadata SMPTE UMID
(Insert, Report & Scrub)
Program ID
House Number Watermarking
(Insert, Report & Scrub)
Closed Captions Detection
(CEA608, CEA708)
Signaling detection (WSS, AFD (inc SMPTE 2016), VI)
Content Advisory Rating
(XDS, V-chip)
ANC Timecode (720p, 1080i)
VITC Timecode (525, 625)
User Definable ANC Detectors
Dolby E Guardband reporting
Timecode Logging

On Screen Display Picture Region Configuration
On/Off
Audio Level Meters
Audio Presence & Type
Content advisory system & rating
2 x 19 character caption
generators
Timecode display
Average picture level

User Memories..... 16 x Save / Recall / Rename