

DVB-ASI output module for Luminato platform

The DVB-ASI output module enables flexible multiplexing of SPTS and MPTS video services and also PSI/SI table streams. High quality multiplexing module is ideal for an IP centric headend to create MPTS at the main headend for sending through DVB-ASI or IP network to remote headends.



Versatile functionality

Luminato multiplexer enables flexible multiplexing of SPTS and MPTS video services and also PSI/SI table streams. The multiplexer is ideal for an IP centric headend to create MPTS at the main headend and send them through to IP network to remote headends.

The Luminato quad ASI output module support selection of free-to-air and scrambled services from IP stream sources, which can be adjusted to the operator's service line-up with the built-in advanced transport stream processing capabilities. The Luminato quad ASI output module support Standard Definition and High Definition video in MPEG-2 and MPEG-4 AVC video formats and numerous audio formats. Optionally, content protection can be done based on DVB simulcrypt standard.

Effective flexibility

Luminato quad ASI output module is fully compatible with the high-performance Luminato chassis, where it can be fitted freely to any of the six module slots. In accordance with the Luminato system architecture, the video processing is performed on the quad ASI output modules, which enables low-cost applications even with partially equipped chassis, while having the performance scalability to fully equipped chassis.

Embedded content protection

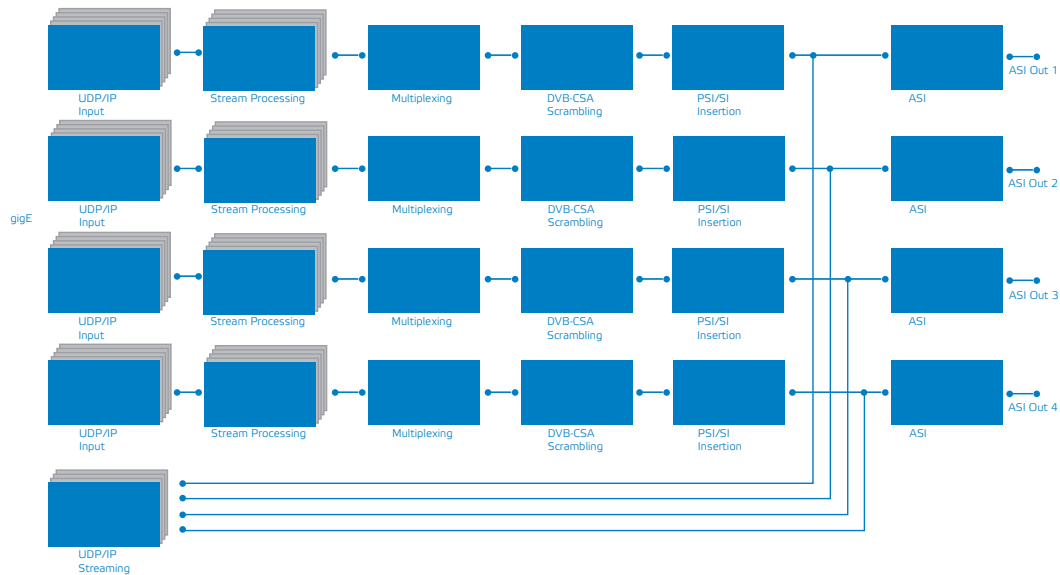
Quad ASI output module has the optional capability to do DVB Common Scrambling Algorithm content protection. The embedded scrambling doesn't require any additional hardware and the user can freely select which services will be scrambled. The content is never accessible in unprotected format which is highly appreciated by content

providers. The component level scrambling is also supported to allow only video and audio scrambling and leave other streams untouched to avoid descrambling challenges for bursty data in set-top box.

Efficiency and reliability

With the advanced transport stream processing, operator can select the services and components which are relevant to his network. The Luminato will follow-up any changes on the stream to automatically readjust the processing to provide uninterrupted service. This will allow the operator to efficiently manage network capacity usage.

The available tools provide high degree of automated features to minimise the cost of system set-up and operation, and avoiding downtime due to changes in the received services.



Block Diagram, Quad ASI Out

Features

- DVB TS over UDP/IP reception
- IP address / UDP port selector for input streams
- Network dejittering
- Advanced transport stream processing
- Multiplexing
- Priority multiplexing
- PCR processing
- DVB CSA content protection
- PID remapping and filtering
- PSI/SI pass-through or automatic/manual regeneration
- Service followup, service ID remapping, stream type filtering, SID followup and service information
- MPEG transport stream over UDP/IP streaming
- MPTS passthrough
- DVB-ASI output

Technical specifications

Parameter	Specification	Note	Parameter	Specification	Note
IP inputs			IP streamer output of multiplexer		
Frame formats	raw UDP/IP RTP/IP	2)	Framing format	raw UDP/IP	
Max inputs streams per module	128		Traffic type	unicast or multicast	
Dejittering buffersize	200 ms	adj. 100... 500 ms	TS packets per UDP frame	1 ... 7	
Multiplexers			Max TS speed per streamer	100 Mb/s	
Number of multiplexer per module	4		Maximum speed total	300 Mb/s	shared with 4 outputs
Max input services per multiplexer	64		General		
Max components per service	32		Power consumption	6,5 W	ASI outputs
DBV ASI Output			Supply voltages	24 V	
Impedance	75 ohm		Connectors,	BNC 75 ohm	
Traffic mode	adjustable	variable/constant bit rate	Dimensions	20 x 109 x 253 mm (HxWxD), 1)	
Output speed for constant bitrate	adjustable	1...100 Mb/s	Weight	0,3 kg	
Maximum speed per interface	100 Mb/s	payload traffic	Enclosure classification	IP21	
Maximum speed total (4 ports)	300 Mb/s	shared with 4 outputs	Operating temperature range	-10...+55 °C	
Standard	EN 50083-9		Storage temperature range	-30...+70 °C	
			Specification is met	0...+45 °C	
			Note!		
			1) Dimensions excluding connectors and locking screws		
			2) No timestamp synchronization or packet reordering is implemented		