

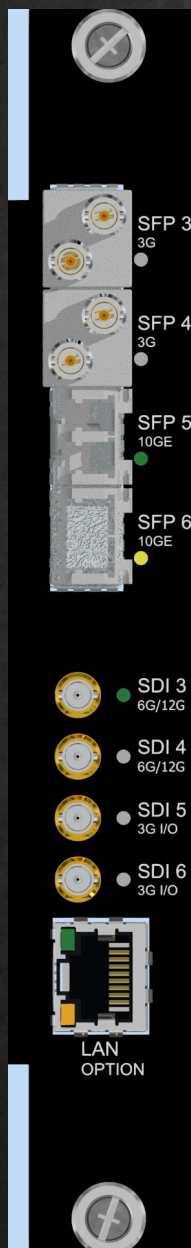
QIO Expansion Module



This optional board adds multiple in- and outputs to the HDQLINE display platform and therefore increases the flexibility and the number of possible applications for this family of professional broadcast displays. Among them are 2x 10GigE SMPTE ST 2110/ST 2022 Video-over-IP (up to 3 channels each) interfaces.

Complete list of interfaces:

- 2x 10GigE interfaces supporting ST2110/ST2022
 - 2x 2x 3G SDI input/output*
 - 2x 6G SDI input*
 - 2x 3G SDI input/output*
 - 1x GigE
- 2x Fiber (SFP+ modules not included)
 - 2x Dual coax/fiber (SFP modules not included)
 - 2x HD BNC
 - 2x HD BNC
 - RJ 45, monitoring



SFP 3, SFP cage
Mode LED

Prepared for single/dual SDI Rx SFPs (copper or fiber, Non MSA) 1.5, 3.0G

SFP 4, SFP cage
Mode LED

Prepared for single/dual SDI Rx SFPs (copper or fiber, Non MSA) 1.5, 3.0G

SFP 5, SFP cage
Mode LED

10GigE module, MSA pinout

Red: SFP inserted, Green: Link established

SFP 6, SFP cage
Mode LED

10GigE module, MSA pinout

Red: SFP inserted, Green: Link established

SDI 3
6G/12G

Prepared for up to 6G SDI

SDI 4
6G/12G

Prepared for up to 6G SDI

SDI 5
3G I/O

Prepared for up to 3G SDI

SDI 6
3G I/O

Prepared for up to 3G SDI

LAN

Debug and monitoring of QIO board

*Remark: Some features mentioned in this document may not be released yet. Please contact SONOVTS Media for availability

QIO Expansion Module



Technical Specifications

General

Model	QIO Expansion Module Media over IP Option for HDQLINE Broadcast displays
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Video over IP

SMPTE ST 2022-6 SDI over IP
SMPTE ST 2110-10/20 Video over IP
Up to 3 IP video inputs
Receive via dual 10GE
SMPTE ST 2022-7 supported

Audio over IP

SMPTE 2110-30 Linear PCM audio over IP (Video stream has to be present)
Up to 16 IP audio input streams
Receive via dual 10GE
SMPTE ST 2022-7 supported

Video format

SD-SDI	Not supported yet
HD-SDI	SMPTE ST 292/ST 296/ST 274 1920 x 1080i: 25/29.97/30
3G-SDI	SMPTE 424 (Level A)/ST 274 1920 x 1080p: 50/59.94

Timing

PTP profile support	SMPTE 2059-2 PTP profile
Media Timing	SMPTE ST 2059-1, SMPTE ST 2110-10

Electrical / Mechanical

Operating Temperature	5 °C - 35 °C
Power Requirement	DC 12 – 24V, supplied by HDQLINE display
Power consumption typ (± 5% tolerance)	22W
Dimensions (Width x Height x Depth)	157mm x 172mm x 18mm (fits into HDQLINE option slot)
Weight	approx. 200g

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