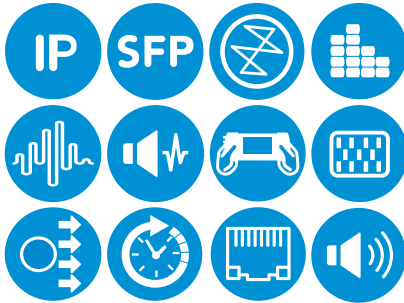# Sx TAG

PHABRIX®
A Leader Company

Portable hybrid IP, SDI & Analog Generation, Analysis & Video/Audio Monitoring

Sx TAG Overview

Sx TAG with its SFP, SDI and analog I/O offers incredible versatility in a handheld device. It is ideal for IP, 3G/HD/SD-SDI, optical SDI, HDMI and Analog test & measurement as well as AES eye analysis, for applications demanding true mobility and ease of use. It provides support for SMPTE ST 2110-20/30/31/40 encapsulation/decapsulation with ST 2059 PTP, SDP and NMOS as well as SMPTE ST 2022-6 encapsulation/decapsulation, using 10GE IP SFP+ modules developed by Embrionix. Its advanced analysis toolset also includes a Waveform, Vectorscope, Data Viewer, ANC status and Inspector, AV Delay analysis as well as AES eye analysis.

Key Features

Hybrid IP/SDI + Analog generation, analysis & monitoring

- Simultaneous generation and analysis for SMPTE compliance testing
- Encap/decap of ST 2110-20/30/31/40 with IP to SDI gateway, ST 2059 PTP, AMWA NMOS IS-04/IS-05, as well as ST 2022-6
- 3G/HD/SD-SDI support plus Analog Composite [PAL-I, PAL-N, PAL-N (ARG), PAL-M, NTSC-M, NTSC-M (JP)]
- SFP cage for SDI-Optical, HDMI and IP applications
- Embedded audio generation, analysis & monitoring with 1x AES in, 1x AES out, 48kHz 75 Ohm
- Balanced stereo analog audio I/O
- Auto Bi-level, Tri-level and SDI Genlock with cross lock capability
- Dolby® bitstream generation and analysis
- AV Delay generation and analysis
- Reference output generated internally or locked to input

Advanced video analysis toolset

- Over 300 formats supported for compliance monitoring
- Picture View with zoom and cursors

- 12-bit YUV/RGB Waveform Monitor with horizontal/vertical zoom, and cursors
- Vectorscope with zoom and 100%/75% markers
- Signal generation with 32 test patterns including Pathological, Zone Plate, moving patterns and user ident
- Data Viewer with Grid and Stream Views
- CRC/EDH error, SDI cable length and ST 352 indicator
- Input timing wrt Reference
- HANC/VANC status and inspector
- AV Delay analysis

Multi-channel audio analysis & monitoring

- Embed a single external 48kHz synchronous AES stream into the generated video stream
- Extract embedded audio and export it via the AES output
- 16 channel audio metering
- Dolby E®, Dolby Digital® and Dolby Digital Plus® bitstream generation and analysis
- Audio AES eye analysis

Remote access, automation & logging

- TCP/IP interface for remote control and automated testing
- Comprehensive status logging with custom reports
- Instrument picture capture to simplify fault finding

Ultra-portable, easy to use design

- High quality, 16:9 built-in screen for video monitoring
- Built-in speaker and audio jack for headphones
- Rechargeable lithium battery delivers 1-2 hours operation and mains power also available
- Superior ease of use with color coded GUI
- Lightweight 0.9kg rugged aluminium case for demanding broadcast environments

Inputs & Outputs

BNC & SFP   **General & Audio**

Schematic of the Sx TAG

Specifications

Monitor Details

Display Resolution	480 x 272 pixels auto scaling
Display Type	16:9 24 bit color TFT
Display Size	95 x 54 mm
Processing	All digital

SDI Video Input/Output

SDI Format	SD-SDI, HD-SDI, (3G-SDI Option)
SDI Input/Output	1 x 75 Ohm BNC
EDH	Yes (SD-SDI)

Composite Video Input/Output

Composite Formats	PAL/NTSC
Composite Input	1 x 75 Ohm BNC
Composite Output	1 x 75 Ohm BNC

Reference Input/Output

Genlock	Bi/Tri/SDI with cross lock
Ref Generator	Bi-level PAL/NTSC +/- 5ppm
Generator Timing	0 to 1 frame WRT source

SFP Input/Output

Interface	Single Tx, Single Rx or Transceiver Cage supports MSA or non MSA
Module Types	SDI Fiber, SDI Coaxial, HDMI, 2110*/2022-6

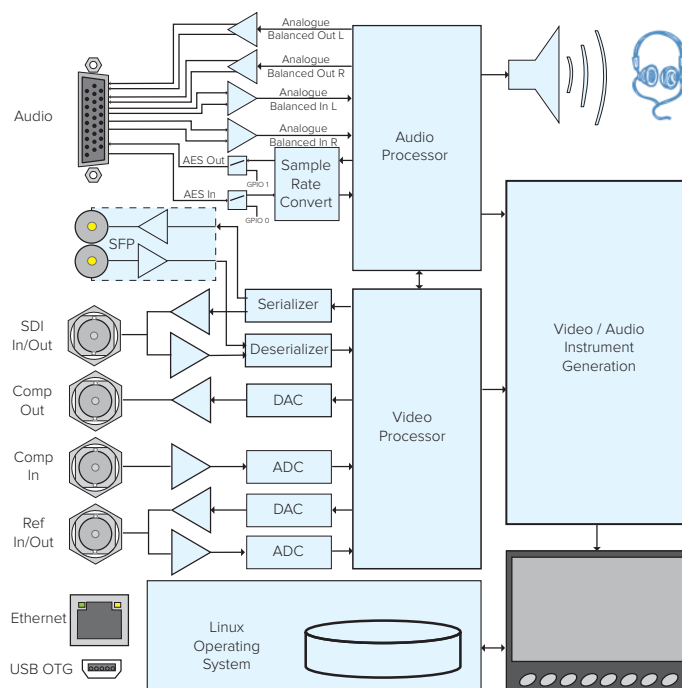See www.phabrix.com for supported SFP modules

Audio

Internal Speaker	0.5 watts
Audio DAC	24 bit stereo
Headphone Socket	3.5mm with auto line out
Generator/Monitor	48kHz 20-bit (SD-SDI) 24-bit (HD-SDI)
Metering	16 channel PPM with phase indication
AES Output	75 ohm AES via 15-way D-type
AES Input	75 ohm AES via 15-way D-type
Analog Output	Balanced stereo pair via 15-way D-type
Analog Input	Balanced stereo pair via 15-way D-type

General

Navigation Panel	5 menu keys, 8 custom select
Integral Battery Supply	1-2 hours lithium polymer
Internal Storage	4GB
Remote Control	Web Browser Interface
LAN Interface	10/100 BASE T
Ethernet	Web Server, Remote Control, (TCP/IP Sockets)
Carry Case	Included
AC Power Supply	Included (Universal)
Security	Kensington™ Lock Fitting
Weight	900g
Size	H:92mm, W:225mm, D:42mm

PHABRIX SFPs
sold separately

Soft carry case and AC power supply, as standard

Ordering

PHSXTAGC - TAG analyzer/generator/monitor SD/HD Handheld (Includes SFP CAGE)

PHSXTAGC-IP - TAG analyzer/generator/monitor SD/HD + IP Handheld (includes SFP CAGE)

Options

PHSXO-ENGT - Engineering bundle (individual options available separately)

PHSXO-IP - IP encap/decap license (req. PHSFP-10SR-IP SFP)

PHSXO-AVD - AV Delay Analysis

PHSXO-EDID - HDMI EDID viewer (req. PHSFP-HDMI-OUT)

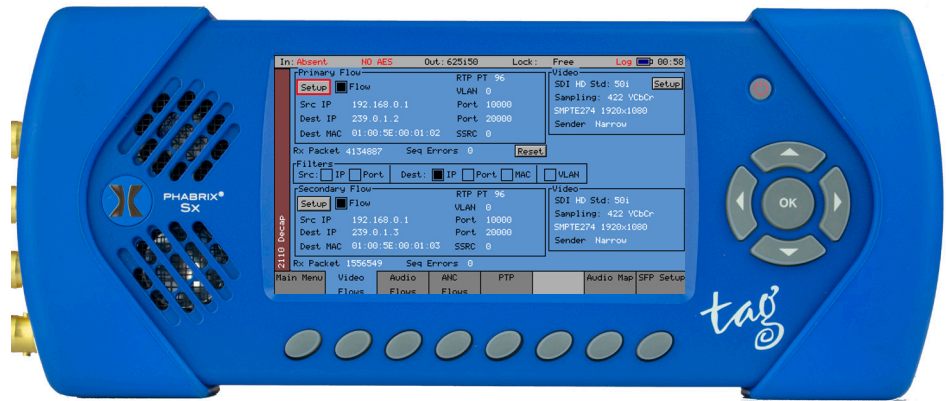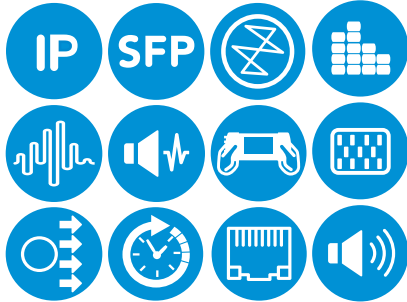See www.phabrix.com/products/sx/tag for further options.

PHABRIX products are continuously being updated. Please visit www.phabrix.com for latest product information. Version d2

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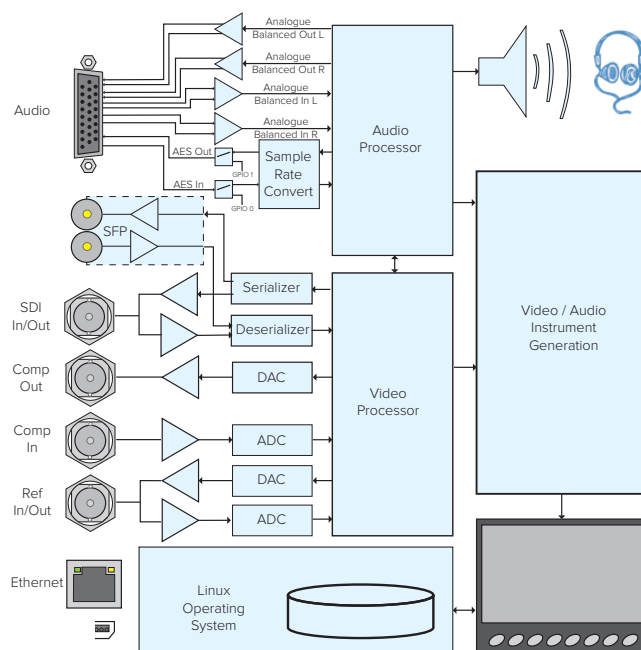| Monitor Details	
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