

Specifications

Signal inputs

Up to 16 3G/HD/SD-SDI auto-sensing, 1-4 inputs are also auto-sensing for CVBS

3G-SDI inputs

Signal: SMPTE 424M-2006

Formats:

Multiviewer: 1080/50p, 1080/59.94p, 1080/60p

Router: 1080/50p, 1080/59.94p

Return Loss: >10db up to 2.97GHz

Distance: 100m

Interface: BNC

HD-SDI inputs

Signal: 4:2:2 SMPTE 292M-C (1.5Gbps)

Formats:

Multiviewer: 1080/50I, 1080/59.94I, 1080/60I,

720/50p, 720/59.94p, 720/60p, 1080/23.98p,

1080/24p, 1080/25p, 1080/29.97p, 1080/30p,

Router: 1080/50I, 1080/59.94I, 720/50p,

720/59.94p

Return Loss: >15db up to 1.485GHz

Distance: 200m

Interface: BNC

SD-SDI inputs

Signal: 4:2:2 SMPTE 259M-C (270Mbps)

Formats: 576/50I, 480/59.94I (for both multiviewer and router)

Return Loss: >15db up to 270MHz

Distance: 400m

Interface: BNC

Analog video inputs

(not suitable for router function)

Signal: PAL (ITU 624-4), NTSC (SMPTE 170M)

Return Loss: >30db up to 5.75MHz

Impedance: 75Ω

Interface: BNC

SDI embedded audio

Quantity: 16x8 tracks or 10x8 tracks

Signal: SMPTE 274M-1994 (SD-SDI), SMPTE

299M (HD-SDI, 3G-SDI)

Digital audio inputs

(not suitable for router function)

Quantity: 12 tracksx2

Signal: AES3 (AES/EBU)

Interface: 75Ω, unbalanced, BNC

Analog audio inputs

(not suitable for router function)

Quantity: 12 tracksx2

Interface: 20kΩ (minimum), unbalanced, BNC

HD-SDI outputs (For multiviewer)

Quantity: 2

Signal: SMPTE 292M

Formats: 1080/50I, 1080/60I

Return Loss: >15 db up to 1.485 GHz

Jitter: < 0.2UI

Distance: 200m

Signal Amplitude: 800mV

Interface: BNC

HDMI outputs

Quantity: 2

Signal: HDMI 1.4

Resolution: 1920 x 1080 @ 50/60 Hz

3G/HD/SD-SDI outputs

(For router, share interfaces with multiviewer. HD-SDI output interfaces)

Quantity: 2

Signal: SMPTE 259M-C (270Mbps)/SMPTE

292M-C (1.5 Gbps)/SMPTE 424M-2006

Return Loss: >10 db up to 2.97 GHz

Jitter: < 0.3UI

Distance: SD-400m, HD-200m, 3G-100m

Interface: BNC

Audio monitoring

3.5mm headphone

Network interface

RJ-45

Other interfaces

Genlock x1, BNC

LTC input x1, BNC

RS-422 x2, RJ45

GPIO x36, Configurable I/O, DB26 x2

Dimension

430mmx320mm x44mm (width x depth x height)

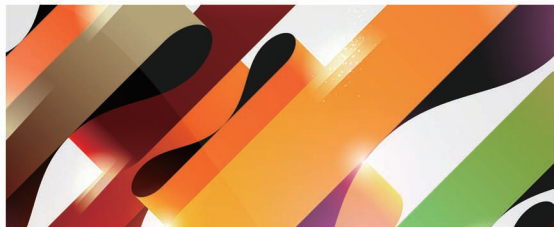
Power

1+1 redundant power unit,

110~220V, 50~60Hz, 35W

Fresco-Atom

Compact Multi-viewer System



Converge, and Beyond



Dayang Technology Development Inc.

Dayang Building, Zhongguancun Software Park,
Haidian District, Beijing 100193, China

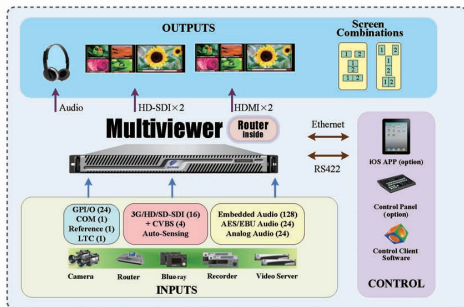
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Fresco-Atom is a flexible embedded OS multiviewer system, which supports up to 16 3G/HD/SD-SDI auto-sensing inputs, the first 4 inputs are also auto-sensing for CVBS, provides 2 HDMI outputs, 2 HD-SDI outputs and built-in 16X2 router. Fresco-Atom can easily achieve any scaling, any repetition and any span for any signal in any location. Fresco-Atom relies on its superb image quality, steady embedded OS, low-power consumption, highly compact chassis and great cost performance, suitable for master control room, broadcast control room, studio, mobile control room and other centralized monitoring occasion.



Key Features And Benefits

Superb image quality

- Advanced image scaling and motion compensation algorithm
- Laborately adjusted polychase filter parameters furthest retain original details while scaling

Rich interfaces of signal and control

- Supports up to 16 3G/HD/SD-SDI auto-sensing inputs, the first 4 inputs are also auto-sensing for CVBS
- 2 HDMI outputs, supports up to 3840x1080/60p
- 2 HD-SDI outputs, synchronized with HDMI
- 8 embedded audio tracks for each SDI input
- 32 tracks AES/EBU audio inputs(DB26)
- 12 tracks analog audio inputs(DB26)
- Dual track headphone monitor output
- 36 bi-directional GPIO (DB26x2)
- 1 LTC input (BNC)
- Reference input (BNC)
- 1 Ethernet port, 2 RS422 serial ports

Dedicated remote control panel

- 1U control panel
- Supports router switching control
- Supports one button full screen and one button layout switching
- One control panel can control multiple devices

Flexible layouts, display and switching

- Any signal sources, any span, any scaling, any repetition, any location for display elements
- Supports picture in picture
- One key full screen for any video window
- One key quick layout switching
- AFD self-adaption
- Metadata extraction, e.g. AFD, video standard
- Manual, NTP and LTC timing
- Supports TSL protocol, dynamic UMD and Tally
- Safe marker, date and digital/analog times with any time zone and support DST, static images
- Countdown timer

Built-in 16x2 router

- 16 3G/HD/SD-SDI inputs + 2 SDI outputs
- Video clean switch
- Audio quick switch
- Supports M2100 router control protocol
- *Router does not support pure audio input and analog video

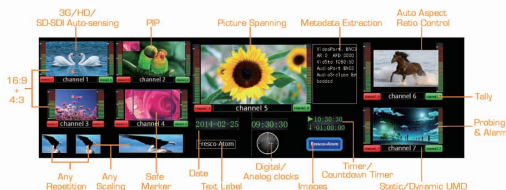
Horizontal or vertical screen display

- Layout design for horizontally or vertically located screens, convenient for flexible placing screens thereby saves more space

Perfect probing and alarm for signals and device status

- Flexible setting for the types of error and threshold
- Video Black Audio Mute
- Video Freeze Audio Too Low
- Video Lost Audio Too High
- Text, flashing frame, SNMP, GPO alarm type, supports logging
- Alarm for abnormal voltage, temperature, fans and so on

Rich Display Elements



Rear Panel



Models

Models	Inputs	Multiviewer	Vertical Screen Display	16 x 2 Router
Fresco-Atom-10	10	✓		
Fresco-Atom-10R	10	✓		
Fresco-Atom-16	16	✓	✓	
Fresco-Atom-16R	16	✓	✓	
Fresco-Atom-16X	16	✓		✓
Fresco-Atom-16RX	16	✓	✓	✓

Cascadable

- Two chassis cascading provides up to 30 inputs

Indicator light and reset button on the front panel

- Six LED lights to show system running and signal status
- Reset button restores factory settings

Ultra-low power consumption, ultra silence and highly reliable

- 35W Redundant power units
- 5Speed governing fans, ultra silence
- Core functions based on FPGA
- Industry grade embedded platform
- 1U chassis, depth is 320mm