

# Medialnfra Strada Finding your best route to peace of mind

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## Medialnfra Strada



## Turnkey SDI/IP routing solution

Medialnfra Strada is a turnkey routing solution designed to give you all the advantages of a real IP environment, while still being able to connect your SDI sources and destinations. Consisting of an advanced customizable router control system and high-density SDI to IP gateways, in combination with switches of our certified partner Arista, Medialnfra Strada comes as a direct drop-in replacement for an outdated SDI router and will provide an immediate equivalent with the option to grow into a full (or hybrid) IP backbone with minimal effort.

Besides the turnkey approach, EVS can also provide native SDI or pure IP routing solutions tailored to fit any infrastructure scenario.

#### Main markets applications



Outside broadcast truck or flypack



Major events services



Hybrid production centers



Transmission, playout and MCR



Production for government and legislative institutions



# Key features

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## Adaptable to any scenario

The MediaInfra Strada solution is designed to manage simple as well as very complex workflows, and suitable for SDI and/or IP environments. Because of the extensive list of implemented APIs and protocols like NMOS-IS04/05, the solution is compatible with almost any third-party broadcast device.

#### Easy deployment

The turnkey solution is sent to you on a single pallet, providing everything you need including the cabling and pre-configured router control interfaces for an easy, drop-in replacement of your outdated SDI router.

## A familiar environment and customizable interfaces

Since your live IP media streams become part of a hybrid router master, operators will not notice the difference between switching SDI sources or switching IP streams. Users are also free to completely modify their interfaces and create their own router panels.

## Peace of mind

Choosing Medialnfra Strada is the assurance that your production infrastructure is in good hands and supported by redundant technology. Our experts stand by your teams no matter what, offering 24/7 support, and a single point of contact for you to enjoy peace of mind every step of the way.

## Why?

Routing is part of every live production environment managed by a standalone router control system.

Live workflows need uncompressed (= high bandwidth) routing solutions. The signals are often still SDI, but are moving into IP, and often both re applicable. Router Control is a natural feature within Cerebrum, which is the core of the solution. The move to IP can be challenging and EVS enables you to successfully nangeover to live IP.

## How ?

## Technology tailored to your needs

Scalable to up to 1024 I/O with options for redundancy, additional audio shuffling and ideo processing.

## Future-proof

Provides you a guaranteed capacity of SDI upon purchase, with the ability to grow with native IP devices.

#### Peace of mind (EVS 24/7 support)

EVS is field proven at providing the most reliable support rough our worldwide port offices.

## Easy deployment (push button)

Includes 100Gb/s cabling and pre-configured router control interfaces ensuring a plug & play installation.

## Move into IP with minimal effort

Medialnfra Strada functions as an SDI router, you as a customer need no IP expertise to plement this.





# MediaInfra Strada turnkey router

SDI routing on IP with 256 I/O\* (e.g. 128x128) -

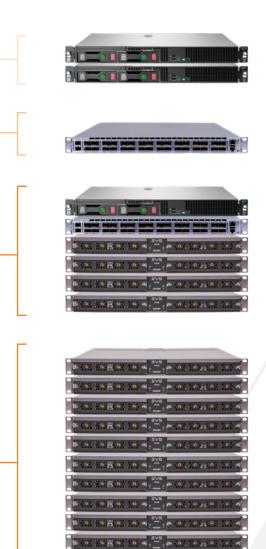
- 1x Arista DSC-7050 32x 100G (capable of ±2000 IP streams) + 8 DAC cables
- 4x Neuron frame with 8 Bridge cards
- 1x Server running Cerebrum turnkey (non redundant)

Upgradable to redundant (-7) Arista switch

Upgradable to redundant Cerebrum Server including a witness server

## Expandable to 1024 I/O in 32 channel steps with agnostic I/O configuration in steps of 8 channels

• UHD are above numbers divided by 4 (both in and out)





# Single & multi-level

Medialnfra Strada single-level provides routing of SDI signals, with the added benefit of Frame Synchronisers being available on every input and output. Medialnfra Strada multi-level adds Audio Shuffling, as well as additional Video and Audio Processing.

	Single-level	Multi-level
Frame-syncs on every input and output (min delay <1ms SDI to SDI)	×	✓
Linear expansion from 256 to 1024 I/O	×	~
Locked to external PTP or B&B	×	✓
Remote Commissioning Included	×	✓
HD/3G/12G Support	✓	✓
Flexible use of I/O for Inputs or Outputs	×	✓
De-Embedding of Audio on all SDI Inputs	×	✓
Embedding of Audio on all SDI Outputs	×	✓
Audio Gain, Phase and Delay on all SDI Inputs and Outputs	×	✓
Mono Level Audio Shuffling	×	✓
Offset delay up to 120 Frames per SDI I/O (4 seconds 1080i, 2 seconds 1080p/UHD)	×	✓
Color Correctors / Proc Amp	×	✓
Use of Industry Standard Formats and Protocols	2022-6	2110-20/30/40
2022-7 Network Redundancy / Control Redundancy Available	×	✓



# Agnostic I/O configurations

SDI I/O is connected to Neuron Modules, which in turn are connected to the non-blocking Arista IP Fabric. These signals can be freely routed throughout the system with vertical switching accuracy. The flexible configuration of each Neuron Module allows for the 32 coaxial connections per module to be configured either as 16x16, 8x24, 24x8, 32x0 or 0x32 I/O\*. This agnostic approach to I/O enables a large amount of flexibility for how the system is used.

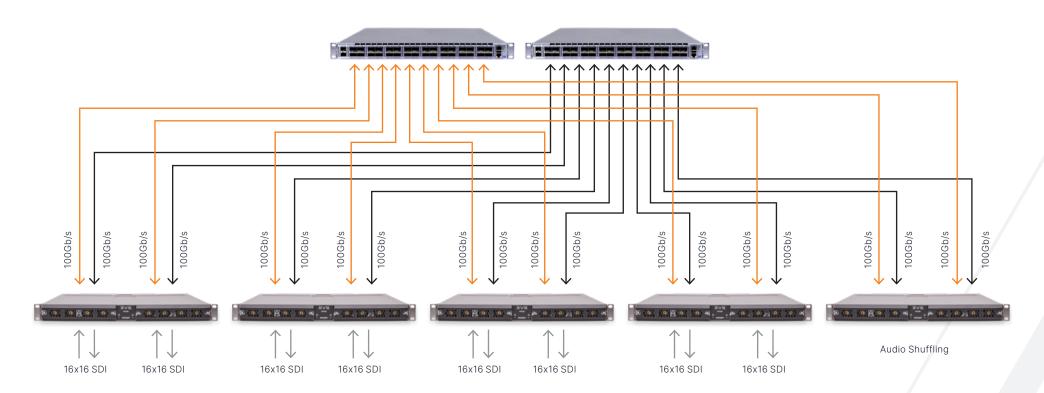


\* Limitations to the number of 1080p channels may apply when going over 100Gb/s total bandwidth



# Signal workflow

When Audio Shuffling is required, multiple audio streams are routed into the dedicated Neuron Shuffle to allow mono-level shuffling and combining of audio originating from different SDI inputs.



MediaInfra Strada-256 multi-level redundant system configured for 128x128 SDI with Audio Shuffling



# Turnkey delivery

## In all cases, MediaInfra Strada turnkey will be delivered with all required components, including:

- Neuron Frames for SDI I/O (Qty 4-16, depending on configuration)
- Neuron Modules for SDI I/O (Qty 8-32, depending on configuration)
- Neuron Frames for Audio Shuffling (Qty 1, multi-level only)
- Neuron Modules for Audio Shuffling (Qty 1-2, multi-level only)
- Arista 7050CX3-32 or 7280CR3-36 IP Switch (Qty 1-2, depending on configuration)
- Cerebrum Server(s) (Qty 1-3, depending on configuration)
- Cerebrum Licenses (Cerebrum SR, Cerebrum Router M & Cerebrum IP Router M)
- Direct Attach Cables (Qty 8-64, depending on configuration)
- Cable Management tray for Direct Attach Cables



## Number of rack units (RU) per solution

# I/O Channels	Single-level Non-redundant	Single-level Redundant	Multi-level Non-redundant	Multi-level Redundant
256	7	11	8	12
288	8	12	9	13
320	8	12	9	13
352	9	13	10	14
384	9	13	10	14
416	10	14	11	15
448	10	14	11	15
480	11	15	12	16
512	11	15	12	16
544	12	16	13	17
576	12	16	13	17
608	13	17	14	18
640	13	17	14	18
672	14	18	15	19
704	14	18	15	19
736	15	19	16	20
768	15	19	16	20
800	16	20	17	21
832	16	20	17	21
864	17	21	18	22
896	17	21	18	22
928	18	22	19	23
960	18	22	19	23
992	19	23	20	24
1024	19	23	20	24

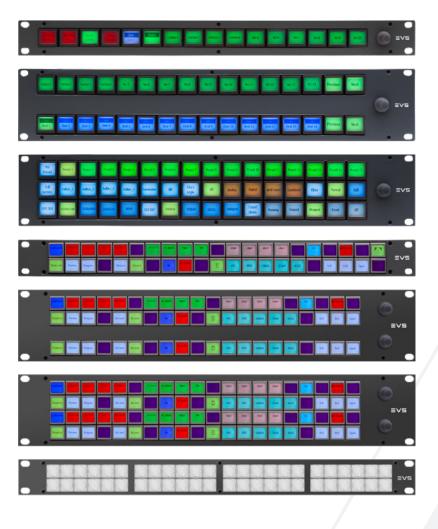
Based on using 1RU cable management for non-redundant solutions, 2RU cable management for redundant solutions



# Familiar routing interfaces

Medialnfra Strada arrives pre-configured to allow routing between SDI sources and destinations using the default X/Y matrix or customized GUI templates from a Cerebrum client. Alternatively, when hard panels or other control customisations are needed, these can be ordered as additional items.





# Upgradable to meet future requirements

As requirements change, the Medialnfra Strada turnkey solution can increase the quantity of Neuron Modules or even grow from single-level to multi-level. Alternatively, if future needs extend even further, the system can be expanded to allow direct connection of IP Native devices, repurposing of existing Neuron Modules for other processing functions or even an expansion of the IP Fabric to support Leaf-and-Spine with SDN control, with the purchase of additional licenses.

MediaInfra Strada turnkey single-level	MediaInfra Strada turnkey multi-level	Project-based Pure IP			
Cerebrum Control					
Supports SDI Routing					
Supports IP Routing with -7 Redundancy					
2022-6	2110	2022-6/2110			
	Shuffing & Processing				
		Direct IP			
		IP Core			
Unified control with Upgrade Path					
Routing Hardware Upgrade Path					



# Get in touch!

Contact us to discuss your SDI and IP routing challenges or to book a live demo.

