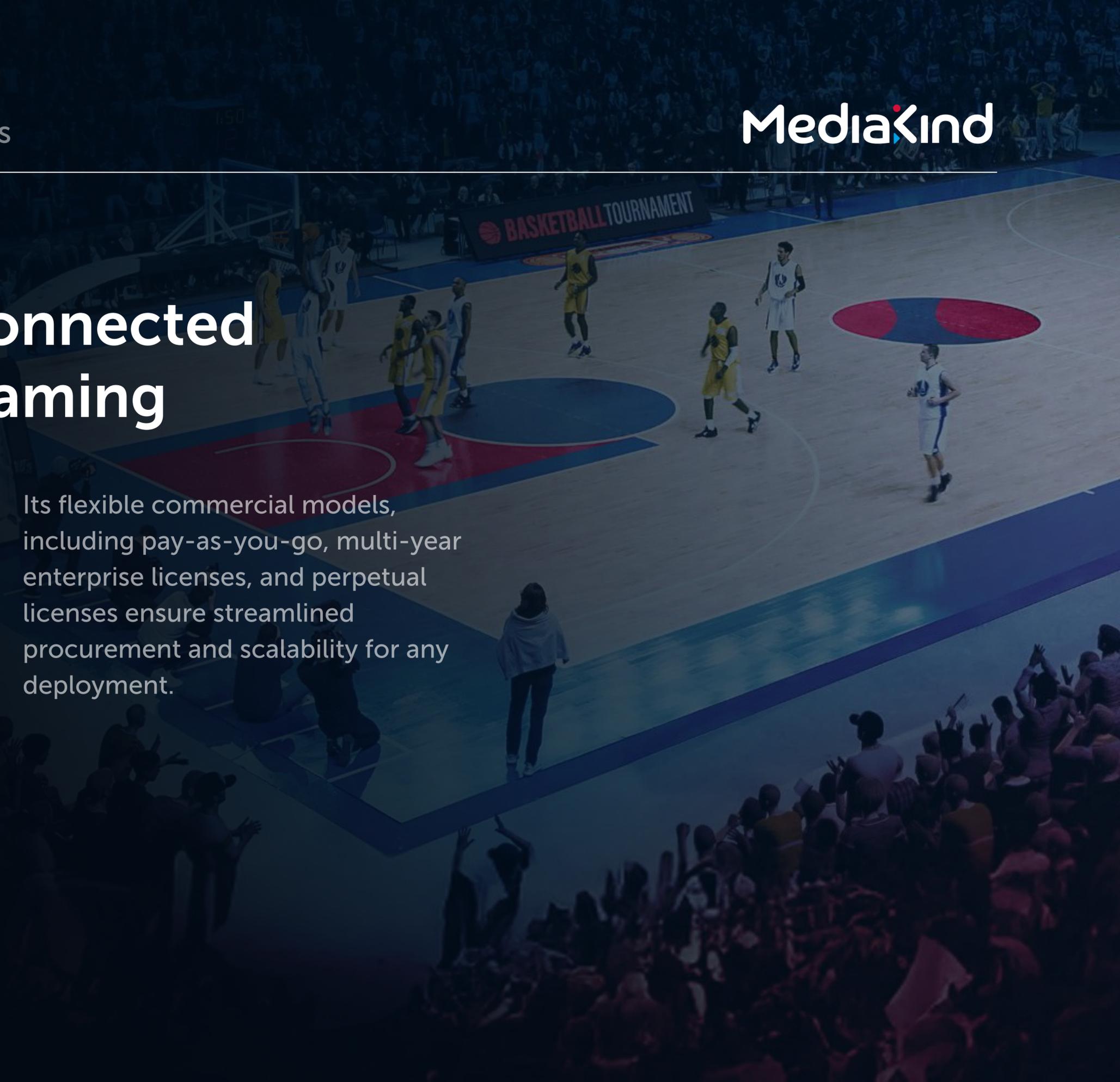CLOUD MEETS ON-PREM

Flexible cloud-connected broadcast & streaming

MK.IO Beam modernizes traditional broadcast and streaming headend workflows with a cloud-connected, software-based approach. Running on standard COTS servers, it delivers cost-effective, portable, and programmable live video processing. Fully integrated with the MK.IO cloud orchestration layer, Beam enables centralized control, monitoring, and software lifecycle management.

Its flexible commercial models, including pay-as-you-go, multi-year enterprise licenses, and perpetual licenses ensure streamlined procurement and scalability for any deployment.

Tech specs

INPUT

Compressed input	IP inputs with IGMPv3-based redundancy, dual multicast redundancy, Pro-MPEG FEC, SRT. RTMP, MPEG-2 TS
Basedband input	3G/HD/SD-SDI, SDI over IP (SMPTE ST 2022-6), SMPTE ST 2110 with NMOS IS-04, IS-05

BROADCAST OUTPUT

Formats	SPTS, MPTS
Protocol	IP, ASI
Multiplexing	Full remuxing with SI/PSI generation, HbbTV, terrestrial
Encryption	DVB-CSA, BISS CA, AES, Director

VIDEO ENCODING

Video codecs	HEVC, H.264, MPEG-2
HDR compatibility	HDR10, HLG10, PQ10, and Dolby Vision 8.1 & 5.0
Rate control	CBR, VBR, and CVQ
Data rates	100 kbps to 60 Mbps

STREAMING OUTPUT

Streaming	Apple HTTP Live Streaming (over CMAF or TS), DASH, and RTMP. Low-latency chunking
Multi-audio	Multiple audio streams per output for HLS, and DASH
Content protection	Microsoft PlayReady DRM for HLS/TS, Smooth Streaming and DASH. Apple Segment for HLS/TS. FairPlay for HLS/TS and HLS/CMAF. Adobe Primetime Access, Widevine, PlayReady, and Marlin for DASH.
Content publishing	Pull scenarios in just-in-time packaging
CDN integration	Interface with leading CDNs, certified with Akamai MSL 4 for HLS and DASH

MONITORING & CONTROL

Cloud control	MK.IO
Interface	Web interface or REST API
Standard protocols	SNMP, NTP, IGMP

AUDIO ENCODING

Audio codecs	MPEG-1 Layer-II, AAC, AAC 5.1, HE-AAC v1 & v2, HE-AAC 5.1, Dolby Digital (AC3) 2.0 & 5.1, Dolby Digital Plus (E-AC3) 2.0 & 5.1
Audio channels	Up to 8 stereo pairs per service
Passthrough	MPEG 1 LII, DD, DD+
Data rates	From 4.75 kbps to 320 kbps (from 64 to 1024 kbps for DD+)
Processing	Loudness control

METADATA AND AD INSERTION

Subtitles	Passthrough and translation for EIA 608/708 Closed Captions, SCTE-20, DVB Teletext, DVB Subtitles, SCTE-27, and ARIB B24
Streaming subtitles	WebVTT for HLS, WebVTT or SMPTE-TT for DASH
Ad insertion	EBIF/EISS/AIT, SCTE-35 passthrough
Nielsen	Watermark extraction for multi-screen devices

Commercial

Multi-year ELA includes 50% channel capacity uplift, full capability, and Beam Enhanced support.

Perpetual includes decode & encode. Multiplexer/packager priced based on throughput requirements.

ELA

	Per channel rate
Premium encode and multiplexer/packager, all-inclusive 150% channels	$73 /month

PERPETUAL

	Per channel
Standard encode	$1,670
Premium Adds UHD and JPEG-XS	$7,000
+	
Multiplexing	$120 /Mbps
Packaging	$30 /Mbps

Pricing valid until 11/15/2025

Dimensioning

MK.IO Beam runs on certified COTS servers or on servers provided by MediaKind.

Broadcast
Maximum capacity for standard channels

A-SERIES
Short form factor, economical,
low density

	Maximum capacity
SD AVC	8 channels
HD AVC	4 channels
HD HEVC	2 channels

E-SERIES
Standard form factor, high density,
high I/O

	Maximum capacity
SD AVC	74 channels
HD AVC	47 channels
HD HEVC	20 channels

H-SERIES
Standard form factor, very high density

	Maximum capacity
SD AVC	114 channels
HD AVC	69 channels
HD HEVC	41 channels

Streaming
Ladder with 5 AVC profiles including 1080i resolution

C-SERIES
2RU multi-slot, standard form factor, high I/O

	Maximum capacity
HD AVC	5 channels

E-SERIES
Standard form factor, high density, high I/O

	Maximum capacity
HD AVC	21 channels

H-SERIES
Standard form factor, very high density

	Maximum capacity
HD AVC	29 channels

Support

HARDWARE SUPPORT

Beam Hardware

For MK.IO Beam deployments on MK.IO Beam hardware.

- ✓ Hardware repair services
- ✓ MediaKind remote diagnostics
- ✓ Coverage includes MK.IO Beam hardware and I/O cards (not software)

SOFTWARE SUPPORT

Beam Base

- ✓ Access to ticketing system

Beam Enhanced

Everything in Beam Base and:

- ✓ Reactive support services with service-level agreement (SLA) and service credits
- ✓ Access to latest software releases
- ✓ Technical support ops available on chargeable basis

Beam Premier

Everything in Beam Enhanced and:

- ✓ Assigned customer success manager
- ✓ Dedicated Slack channel
- ✓ 5 hours per month of technical ops support
- ✓ Additional technical support ops hours at discounted rate

SLA response times

Severity	1 – Critical	2 – Major	3 – Minor	4 – Technical query
Response	30 min	1 hour	12 business hours	5 business days
Remedy	8 hours	16 business hours	Date shared within 10 business days	–
Restore	Date shared within 10 business days	Date shared within 10 business days	–	–

Cold spares

Customers are encouraged to purchase cold spares:

- Ideal for mission-critical environments
- MK.IO Beam software entitlements are easily transferred to spare units
- MK.IO Beam licences tied to MK.IO account for seamless reallocation