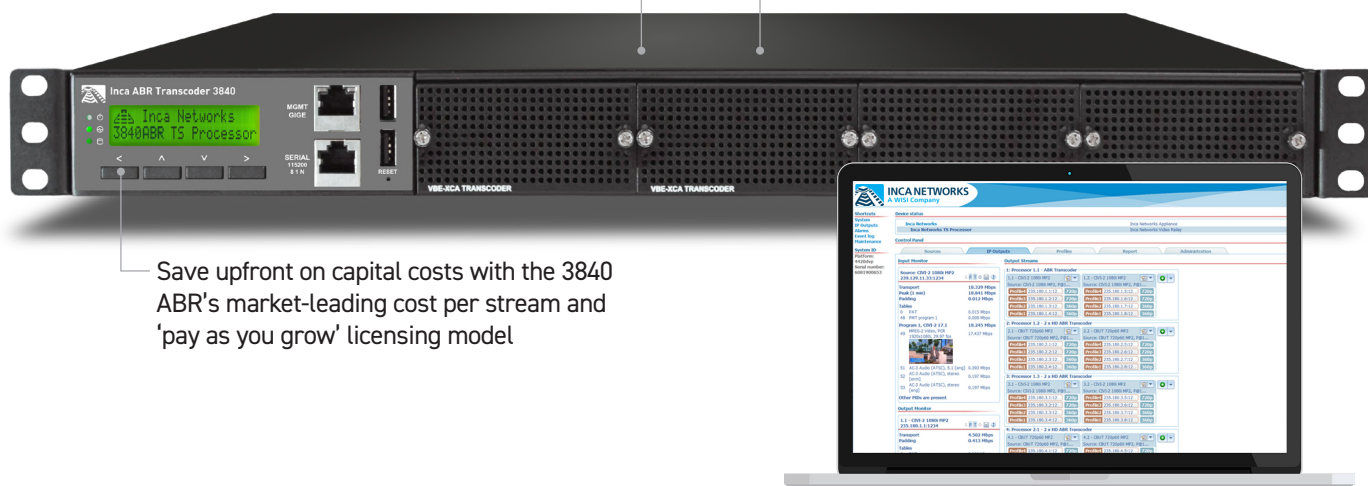# INCA NETWORKS
## A WISI Company

*Inca Adaptive Bitrate Transcoder 3840*
# Carrier-Grade Adaptive Bitrate Transcoder

- ✔ **Predictable performance at a market-leading cost per stream with a globally-deployed hardware transcoding engine**
- ✔ **Supports MPEG-4 AVC & MPEG-2 sources with AAC/Dolby audio to MPEG-4 AVC ABR outputs**
- ✔ **Award-winning VidiOS™ stream monitoring & analysis**

- ✔ **Fully licensed chassis will transcode 24x HD or 48x SD services to frame-aligned ABR profiles**
- ✔ **Professional technical support with market-leading capped support fees per site**
- ✔ **Power efficient with less than 300 W per chassis**

Deliver beautiful video with a field-proven transcoding engine, validated against thousands of broadcast streams worldwide

Plan your project with confidence - Hardware transcoding provides predictable performance and consistent density

Save upfront on capital costs with the 3840 ABR's market-leading cost per stream and 'pay as you grow' licensing model

Rapid configuration and deployment with powerful VidiOS™ tools
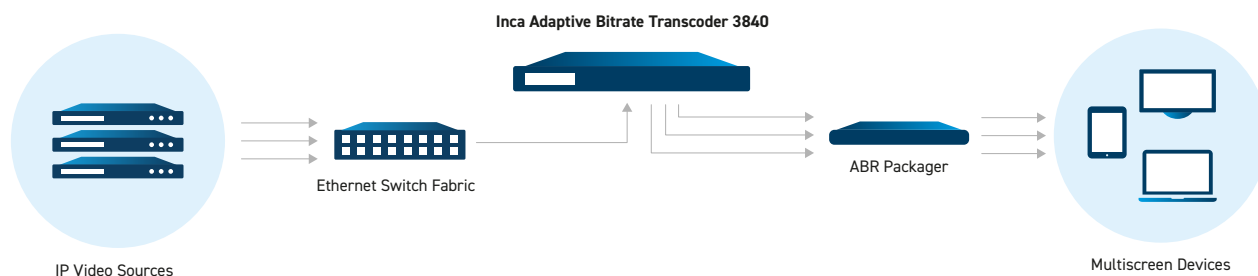
## Deployment Scenarios

- ✔ Launch new live OTT services, eliminate set-top boxes and expand your subscriber base beyond your existing distribution network.
- ✔ Deliver IPTV services to networks where multicast delivery is not possible; for example, over leased DSL facilities.
- ✔ Transcode all local broadcast channels, including primary HD and SD subchannels for over-the-top delivery.
- ✔ Experience an extended product lifecycle with a smooth migration path to HEVC via future hardware upgrade.
- ✔ Seamless integration with Inca Multiscreen Package & Origin 5420ABR or 3rd party packagers.

## Applications

- ✔ Transcode or downscale 24x HD or 48x SD programs to multiple frame-aligned ABR video streams.
- ✔ Enjoy peace of mind with intelligent redundancy options like Automatic Source Failover & N+1 Chassis Redundancy.
- ✔ Experience powerful VidiOS™ management and troubleshooting tools with inbound and outbound video thumbnails, stream capture and download, extensive statistical analysis and stream event logging.
- ✔ Enjoy full headend visibility and mosaic overview with Inca All Seeing Eye integration - monitor all ABR profiles from each source.

## Professional Transcoding for ABR Applications

Up to 24x HD or 48x SD programs · Redundancy Options · 12x Transcode Processors per 1RU

**Inca Adaptive Bitrate Transcoder 3840**



IP Video Sources · Ethernet Switch Fabric · ABR Packager · Multiscreen Devices

# Technical Specifications

### Transport Stream Processing

| | |
|---|---|
| **Inputs** | SPTS/MPTS MPEG-2 Transport Stream<br>Multicast / Unicast UDP IP |
| **Outputs** | SPTS MPEG-2 Transport Stream<br>Multicast / Unicast UDP IP<br>Multiple frame-aligned ABR streams per program |
| **Input and Output Video Codecs** | MPEG-2 (input only) and MPEG-4 AVC, 4:2:0<br>Future migration path to HEVC transcode via hardware upgrade |
| **Transport Stream Optimizations** | PID and Program Filter and Remap |
| **Transport Modes** | Constant, Peak Variable |
| **Closed Captions** | EIA 608/708 passed through if present in source |
| **DVB Subtitle Burn In** | Select by language |
| **DVB Subtitle PID** | Passed through if present in source (can be filtered out) |
| **SCTE 35 Ad Markers** | Passed through if present in source |

### Hardware Video Transcoding

| | |
|---|---|
| **Transcode Processors** | 12x transcode processors per chassis<br>• 4x transcode processors licensed with purchase<br>• 8x additional transcode processors can be licensed at any time |
| **Transcode Processor License** | Each transcode processor can be licensed individually to transcode either:<br>• 2x HD sources to 4x ABR profiles<br>  *HD outputs: max 720p30, max two downscales per source*<br>• 4x SD sources to 2x ABR profiles<br><br>*Additional profile licenses available including 1080p30 - ask your sales rep.* |

### Audio Transcoding (optional - licensed per stream)

| | |
|---|---|
| **Source Audio Codecs** | AC-3, EC-3, AAC (ADTS & LATM), MPEG 1/2 Audio Layer I/II |
| **Source Audio Channels** | 7.1, 5.1, 2.0, 1.0 |
| **Output Audio Codecs** | AAC-LC, HE-AAC, HE-AAC v2 |
| **Output Channels** | 2.0, 1.0 |

### Management & Monitoring

| | |
|---|---|
| **Configuration** | Powerful VidiOS™ web-based user interface |
| **Visual Mosaic Monitoring** | Compatible with Inca All Seeing Eye monitoring product - All Seeing Eye probe capability included |
| **SNMP** | SNMP Trap Forwarding |

### Network Interfaces

| | |
|---|---|
| **Management** | 1000 Base-T |
| **Video** | 4x 1000 Base-T |
| **NIC Redundancy** | LACP, Active Failover, Round Robin |

### Intelligent Redundancy Options

| | |
|---|---|
| **Automatic Service Failover**<br>*(optional, licensed per transcode)* | Automatic failover to backup source<br>Automatic recovery to primary |
| **N+1 Chassis Redundancy**<br>*(optional)* | Automatic failover to spare chassis<br>Automatic recovery to primary chassis |

### Physical

| | |
|---|---|
| **Mounting** | 19", 4 Post Rack, 1RU<br>Slide rails included |
| **Dimensions** | 438 x 44 x 525 mm<br>19" x 1.75" x 20.7" |
| **Rack Rail Depth** | 620 - 805 mm<br>24.4" - 31.8" |
| **Weight** | 15 kg / 33.1 lb |
| **Operating Temperature** | 0 ~ 40 °C |

### Power

| | |
|---|---|
| **Type** | Dual redundant hot swap |
| **Input** | 100 ~ 240 VAC @ 50 - 60 Hz |
| **Power** | <300 W Typical |

### Regulatory Compliance

| | |
|---|---|
| **EMC Standards** | FCC Part 15 Class A |
| **Safety Standards** | CSA/UL 60950-1 |

To arrange an online demonstration or discuss your project, please send a request to **export@wisi.de**

![WISI]