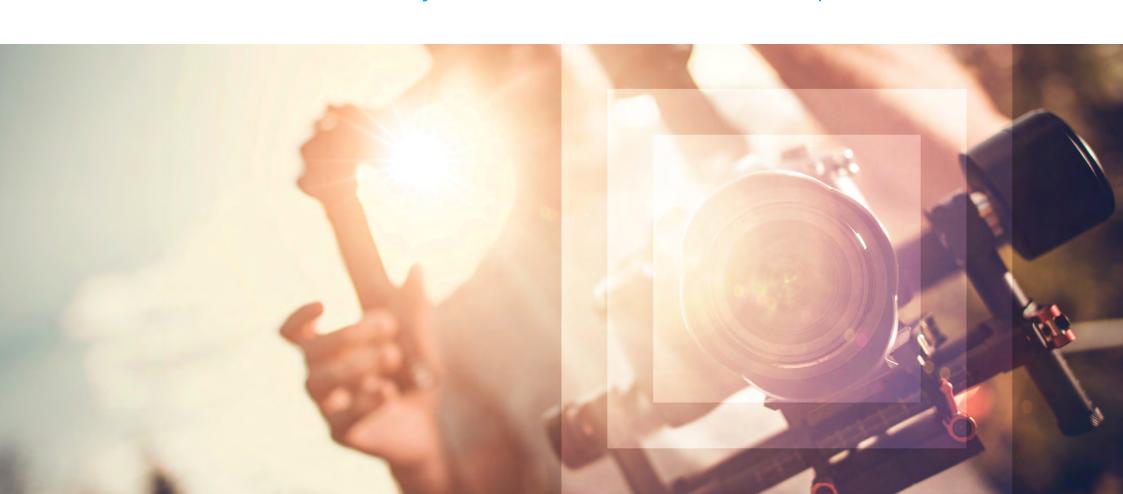




# **Product Overview**

Carrier-Grade Video Delivery With a World-Class User Experience



## Enter the World of WISI

## WISI helps operators around the world deliver beautiful, uninterrupted video 24/7

## Rely on 100 Years of Innovation

Founded in 1926, WISI has been consistently innovating technology for almost 100 years. We support all video codecs, physical interfaces, and streaming formats - enabling operators to seamlessly connect between yesterday, today and tomorrow.

### Rely on a Global Perspective

Video operators in more than 150 countries rely on WISI to provide subscribers with a great TV experience. WISI offices are located around the globe to ensure efficient support and localized application knowledge.



## Rely on a Proven Partner

At WISI, we are a reliable partner to 2500+ customers. We collaborate closely with our channel and technology partners to support the implementation of all video projects, from small network applications to full headend deployments.

### Rely on Customer-Centric Values

We are Main Street, not Wall Street. As a privately owned company, we are the kind of partner that provides solutions based on our customers' needs and challenges, not the kind that chases orders and quarters.







# WISI Provides End-to-End Video Delivery

Video operators rely on WISI to distribute video content to any screen on any network.



Inca (now WISI) covers our needs from beginning to end. We've got the equipment that brings in raw content and converts it to IP. We've got the gear that takes that IP content and delivers it to our customers in a high-quality fashion. Inca's strength is definitely the superior quality of their end-to-end provisioning.

- Kevin Hamilton Central Office Supervisor Grafton Technologies











#### Receive & Groom

- ASI, 8VSB, QAM
- ✓ GigE, 10G, SFP, SFP+
- ✓ Demultiplex
- ✓ PID Filter & Remap

#### Transcode & Encode

- ✓ HEVC
- ✓ MPEG-4 AVC
- ✓ MPEG-2
- ✓ Baseband (HDMI, SDI, AV)

## Multiscreen

- ✓ ABR Transcode
- ✓ Package
- Origin Server

#### Video Distribution

- ✓ Transport/Routing
- ✓ IP, ASI, QAM, Analog
- Encrypt, Decrypt
- Multiplex
- ✓ RTP+FEC

## Monitoring & Analytics

- ✓ VidiOS<sup>TM</sup> analysis tools
- ✓ Video Thumbnails
- Stream Capture
- Mosaic View

## Carrier-Grade Video Delivery Solutions

#### Inca Modular Series 4400

Linear & ABR High-Density Transcoder



High-density, modular platform to transcode between MPEG-2, MPEG-4 AVC, HEVC with options to receive 8VSB, ASI or IP inputs

## Inca Multiscreen Package & Origin Server 5420ABR

Live-Streaming Packager & Origin Server



Package and deliver adaptive bitrate video to multiscreen devices

#### **Blueline Transcoder Series**

Cost-Effective Linear IP Video Transcoding



Transcode linear IP services between MPEG-2 and MPEG-4 AVC

## Inca Adaptive Bitrate Transcoder 3840

ABR Transcoder with Market-Leading Cost per Stream



Transcode HD and SD sources to frame-aligned profiles for ABR applications

#### Inca Multiscreen Launch Platform

All-In-One OTT Solution



Transcode, segment and package sources for internet video services

## Inca Borderguard 1248

Secure IP Video Transport Solution



Deliver IP video streams easily and securely between multiple network segments, including remote locations

## Tangram Video Platform

High-Density Video Processing



Bridge IP to Analog or QAM, receive 8VSB, encrypt/decrypt and more with a modular headend processor

## Chameleon Headend Platform

Versatile Video Processing & Encoding



Handle multiple formats simultaneously; encode baseband to MPEG-2 or MPEG-4 AVC; optional RTP+FEC

## Inca All Seeing Eye 5420

Award-Winning Visual IP Video Monitoring



Experience powerful visual monitoring and an overview mosaic of all video streams in the headend

## Meet VidiOS™

## The Core of Every Inca Product



## Available with:

Inca Modular Series 4400, Inca Adaptive Bitrate Transcoder 3840, Inca Multiscreen Package & Origin Server 5420ABR, Inca Multiscreen Launch Platform, Inca Borderguard 1248, Inca All Seeing Eye 5420.



#### Advantages at a glance:

- Award-winning user interface designed for ease-of-use and operational efficiency
- Sophisticated web-based platform for management and troubleshooting
- Powerful grooming and monitoring tools with carrier-grade control and visibility
- Extensive statistical analysis and transport stream event logging
- View inbound and outbound video thumbnails and stream sample downloads
- Enables rapid configuration and deployment using any web browser

## Inca Modular Series 4400

## Linear & ABR High-Density Transcoder



Transcode video sources to feed new or existing networks using a powerful, globally-deployed solution

Profit from using a modular platform - add additional audio or video transcodes at any time

Enjoy peace of mind with intelligent redundancy options and reliable 24/7 operation

## Profit From a Scalable Platform

The 4400's modular platform enables operators to scale their infrastructure and easily add capacity as business needs grow, thus reducing capital and operating expenses.

All models include powerful and easy-to-use VidiOS™ management and troubleshooting tools with inbound and outbound video thumbnails, stream download, extensive statistical analysis, and end-to-end process logging.

- ✓ Transcode between MPEG-2, MPEG-4 AVC and HEVC in HD and SD
- ✓ Linear and adaptive bitrate (ABR) support
- ✓ Input modules available for GigE, 8VSB/ QAM, and ASI
- ✓ Award-winning VidiOS™ stream analysis and troubleshooting tools

- Low power consumption with AC and DC power options
- Centralized video management with All Seeing Eye monitoring
- ✓ 10G SFP+ support
- → High-density audio transcoding for Dolby Digital, AAC and MPEG-Audio

## Inca Modular Series 4400





Inca's video delivery system is hands down the best out there. I've never seen any other company doing what Inca's doing with that. Until their competitors can do what Inca's doing with their intelligent video delivery system, there's just no comparison.

- Pete Anderson Central Office Supervisor Farmers Telephone Cooperative

## Multiple Chassis Options

4410 Chassis



- ✓ 1 expansion module bay
- ✓ Up to 12x HD or 30x SD linear services
- ✓ Up to 24x ABR bitrate profiles
- ✓ Option for 4x 8VSB or 6x ASI inputs

## 4420 Chassis



- 2 expansion module bays
- ✓ Up to 24x HD or 60x SD linear services
- ✓ Up to 48x ABR bitrate profiles
- ✓ Option for 8x 8VSB or 12x ASI inputs

## 4440 Chassis



- 4 expansion module bays
- ✓ Up to 48x HD or 120x SD linear services
- ✓ Up to 96x ABR bitrate profiles
- ✓ Option for 16x 8VSB or 24x ASI inputs

## Inca Adaptive Bitrate Transcoder 3840

# ABR Transcoder with Market-Leading Cost per Stream



Deliver beautiful video with a globally deployed OTT solution

Experience predictable density and low power consumption with a hardware transcoder

Launch multiscreen at a market-leading cost per stream

## Confidently Launch New Live OTT Services

Operators can launch new ABR video services easily with the 3840's unique 'pay-as-you-grow' licensing model that enables low upfront costs and easy forecasting.

Experience rapid configuration and deployment with award-winning VidiOS<sup>TM</sup> stream monitoring and analysis tools, allowing quick setup of OTT services through any web browser.

The 3840 provides high-quality outputs with consistent density and performance using a globally deployed hardware transcoder.

- ✓ Transcode up to 24x HD or 48x SD services to adaptive bitrate profiles
- Deliver frame-aligned MPEG-4 AVC outputs from MPEG-2 and MPEG-4 AVC sources
- Seamless integration with Inca's
   5420ABR and 3rd party packagers
- ✓ Powerful VidiOS™ with inbound and outbound video thumbnails and extensive statistical analysis

- Adjust density or profile configurations easily using a flexible licensing model
- Automatic service failover and chassislevel redundancy options available
- Additional 3840x model optimized for 1080p30 and 720p60 - fully licensed for 12x HD or 24x SD services

## Reach New Subscribers with OTT Services



# Inca Multiscreen Launch Platform All-In-One OTT Solution



#### **Features**

- Adaptive bitrate transcoder with integrated packager and origin server
- ✓ Transcode up to 12x HD or 24x SD sources to frame-aligned profiles in HLS
- ✓ Includes VidiOS<sup>TM</sup>, sophisticated management platform with intuitive UI

# Inca Multiscreen Packager & Origin Server 5420ABR

Live-Streaming Packager & Origin Server



- Carrier-grade live streaming HLS packager and origin server for HD and SD streams
- Seamless set-up with intuitive drag-anddrop playlist builder
- ✓ Award-winning VidiOS<sup>™</sup> monitoring engine with powerful grooming tools

## Tangram Video Platform

# High-Density Video Processing



## Flexible Solution for Edge Applications

The Tangram is a sophisticated, modular platform that allows operators to perform multiple functions within one power-efficient chassis.

Tangram makes it easy to deliver services anywhere on the network in IP or legacy RF output formats. In addition to IP streaming, Tangram offers output modules for ASI, clear or encrypted QAM and modulated analog RF – ensuring operators can take advantage of every revenue opportunity in their serving area.

- Combine up to 6 modules in 1RU to mix different applications based on deployment needs
- Flexible AC or DC power options low power consumption
- Hot-swappable modules, power supplies and fans

- ✓ High reliability with module and source redundancy options
- Full SNMP monitoring and remote control via web interface
- Confidence monitoring with Inca All Seeing Eye visual mosaic

# Tangram Video Platform





I was tired of constantly replacing the hard drives in our old servers. With the Tangram, the ease of use and reliability made this a smooth transition, and space and power savings were enormous.

- Justin Beaman Video Network Technician Midwest Video Solutions

## **Module Options**

Up to 6 modules can be used in a single Tangram chassis. One module type can be installed exclusively or in combination with other modules to support different applications.



GT21 IP to Analog

✓ Up to 6 NTSC analog channels on 2 RF outputs



GT23 IP to QAM

✓ Up to 12 QAM channels on 2 RF outputs



GT31 Satellite Receiver

✓ 4x DVB-S/S2 RF inputs



GT32 ASI to IP

4x ASI input or output, demux & passthrough



GT33 8VSB/QAM to IP

8x 8VSB/QAM tuners on 4 RF inputs



GT41 Video processor

Mux/demux, encrypt/ decrypt (Verimatrix, Pro:Idiom, Samsung LYNK), RTP+FEC

## Chameleon Headend Platform

# Versatile Video Processing & Encoding



Ideal solution for broadcast feed reception and lower density applications

Capture live events and distribute as MPEG-2 or MPEG-4 using baseband encoder

Flexible video processor that handles multiple formats simultaneously

# The Perfect Bridge Between Headend Technologies

The highly flexible Chameleon allows operators to bridge easily between legacy and digital environments, supporting multiple input and output formats simultaneously.

The Chameleon's extensive license options enable flexible configuration for inputs and outputs, with options for FEC, multiplexing, encryption, and decryption. Additionally, the Chameleon's small footprint and low power consumption allows operators to save on headend costs by replacing inefficient legacy gear.

- Receive 8VSB, QAM, ASI or IP output as Analog, SDI, QAM, ASI and/or IP
- Encode HDMI, HD/SD-SDI and A/V inputs to IP digital outputs
- Optional IP RTP + FEC transmit and receive

- Low power consumption with redundant PSU options
- Change functionality at any time with the click of a button
- Monitor thumbnails using the Inca All Seeing Eye

# Professional Video Delivery



Blueline Transcoder Series
Cost-Effective Linear IP Video Transcoding



#### **Features**

- ✓ MPEG-2 or MPEG-4 IP transcoding in 1RU
- Field-proven, reliable hardware transcoding engine for consistent density and performance
- ✓ Fixed density for up to 12x HD or 24x SD services

Inca Borderguard 1248
Secure IP Video Transport Solution



- Powerful alternative to limited layer three multicast routing for secure video delivery
- ✓ Deliver wholesale video with unique channel lineups to remote sites
- ✓ Sophisticated VidiOS<sup>TM</sup> monitoring with extensive statistical analysis and stream logging

## Inca All Seeing Eye 5420

# Award-Winning IP Visual Video Monitoring

**INCANETWORKS** 

Confidence monitoring of all headend video streams, including streams from 3rd party vendors

Sophisticated visual mosaic powered by VidiOS™ web-based user interface

Compatible with the WISI's intelligent headend product family: Inca, Tangram and Chameleon

# The state of the s

- Real-time color-coding to highlight stream impairments and outages
- ▼ Email notifications when alarms occur and clear
- Monitor transport stream statistics including continuity errors, low bitrate, missing PAT, missing PMT, and video frame loss
- ✓ Detect encrypted streams

# WISI Technical Support

# Rest Easy with Reliable 24/7 Operation

#### **Technical Support Contract Includes:**

- ✓ Responsive 24/7 support services
- ✓ Email and phone support
- ✓ Initial guided tour of the user interface
- ✓ Diagnostic file analysis
- ✓ Application review and troubleshooting
- Direct access to developers and engineers when needed
- Customer portal access WISI Connect
- Ongoing firmware development



There are lots of solutions available in the market but what's missing is the comprehensive support that Inca delivers.

~ Rob McCann Clearcable Networks

## Experience Support Backed by Industry Veterans

The WISI America support team consists of former cable and IPTV headend engineers who understand the daily complexities of managing a video headend.

Collectively, WISI America support team members have decades of experience in the field and are certified by the SCTE-ISBE as Digital Video Engineering Professionals (DVEP). They use their deep knowledge of video applications to expertly facilitate configuration and troubleshooting questions about Inca and WISI products.



WISI is committed to a rapid resolution of all technical issues. The support team works in-house and collaborates closely with engineers and developers to diagnose and resolve customer issues.

Our customers experience reliable and efficient operation thanks to a responsive world-class team with strong industry, product and technical knowledge.



Charles Stone - WISI Support Team, Certified SCTE-ISBE Digital Video Engineering Professional







# Contact us today

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