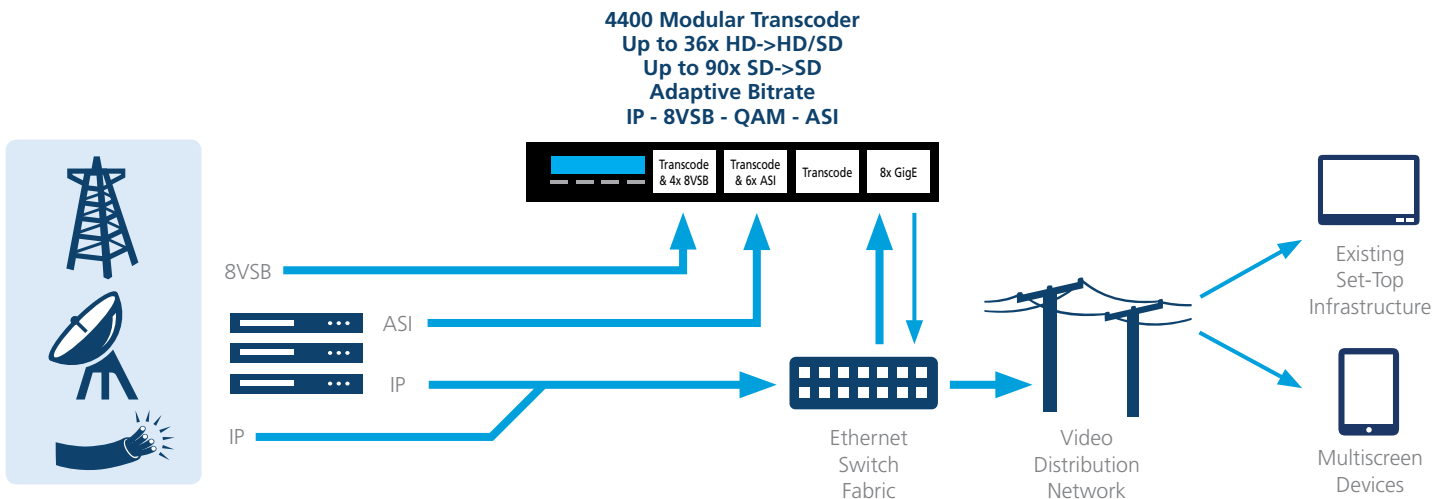


The modular platform for Intelligent Video Delivery



- High-Density Linear Transcoding
- Multiple 1RU Chassis Options
- MPEG-4 & MPEG-2 Sources & Outputs
- GigE, 8VSB, QAM, ASI Inputs
- Adaptive Bitrate Support
- Auto Failover to Backup Services
- VidiOS™ Stream Analysis

The Inca Modular Series 4400 features flexibility with processing modules and high-capacity network interfaces. With the 4400 series you can optimize the format, resolution and bitrate of large numbers of live satellite, IP and off-air digital sources for delivery to set-top boxes or multiscreen devices. Options include modular platforms with up to three bays that can transcode, transrate or downscale up to 36 HD or 90 SD programs to MPEG-4, in just one rack unit of space, with integrated grooming and monitoring of all streams. Optional front-end input modules include the Inca Receiver 4400, enabling reception and transcoding of off-air sources in a single box, and the Inca ASI 4400, for interfacing with existing headend equipment. The Inca Modular Series 4400 allows you to scale your infrastructure and easily add capacity as your business grows, reducing capital and operating expenses.





Affordable. Reliable. Easy to Use.

HEADEND

Inca 4400
MODULAR SERIES

Inca Networks Modular Series 4400 Applications

- Affordably meet IP video processing needs with product configurations for requirements of all sizes, and input options for IP, off-air and ASI
- Enable efficient HD and SD IP video distribution over DSL and cable networks by transcoding high bitrate MPEG-2 or MPEG-4 AVC sources to optimized MPEG-4 AVC
- Create multiple frame-aligned video streams for adaptive bitrate delivery to multiscreen devices
- Enjoy powerful VidiOS™ management and troubleshooting tools with inbound and outbound video thumbnails, stream capture and download, extensive statistical analysis and stream logging
- Enable full headend visibility with included probe capability and integration with the Inca All Seeing Eye monitoring system
- Transcode MPEG-4 sources to MPEG-2 CBR or VBR outputs to feed legacy cable systems
- Optimize high bit rate single- and multi-program streams from satellite receivers, existing ASI equipment and IP sources for your IP video network, using robust VidiOS™ tools for demultiplexing, program extraction and remapping
- Efficiently receive all your local broadcast channels, including all primary HD and secondary SD sub-channels, and transcode them for delivery over DSL, cable and over-the-top networks
- Ensure seamless compatibility with existing systems, with easy-to-use VidiOS™ controls for specifying output stream parameters



IP Sources



IP Outputs



Transcode Profiles

Visit the product page for full size screen captures and videos





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Inca 4400
MODULAR SERIES

Inca Networks Modular Series 4400 Technical Specifications

	4410	4420	4430
Expansion Module Bays			
Hardware Transcoding - Linear	Up to 12x HD, 30x SD sources	Up to 24x HD, 60x SD sources	Up to 36x HD, 90x SD sources
Hardware Transcoding - ABR	Up to 24x Profiles	Up to 48x Profiles	Up to 72x Profiles
8VSB / QAM Receivers	Up to 4	Up to 8	Up to 12
ASI Input Ports	Up to 6	Up to 12	Up to 18
VidiOS™ Transport Stream Processing			
Input and Output	MPEG-2 SPTS/MPTS Transport Stream input, SPTS Output HD & SD, MPEG-2 & MPEG-4 AVC Input and Output Payload Multicast / Unicast UDP IP		
Output Streams	48	96	128
Transcoded Outputs	Up to 30	Up to 60	Up to 90
Direct/Probe Outputs ³	10 ³	10 ³	10 ³
PID and Program Filter and Remap	YES	YES	YES
Jitter Correction	YES	YES	YES
Strip Null Padding	YES	YES	YES
Multiplex Modes	Constant, Variable, Peak	Constant, Variable, Peak	Constant, Variable, Peak
TS Mux Rate VBR <-> CBR Conversion	YES	YES	YES
Management			
VidiOS™ Web Based User Interface	YES	YES	YES
Inca All Seeing Eye Probe Capability	Included	Included	Included
SNMP Trap Forwarding	YES	YES	YES
Network Interfaces			
Management	1000 Base-T	1000 Base-T	1000 Base-T
Video	5x 1000 Base-T	7x 1000 Base-T	8x 1000 Base-T standard 2x 10 Gig SFP+ optional
NIC Redundancy ²	YES	YES	YES
Power			
Type	Single	Dual Redundant Hot Swap	Dual Redundant Hot Swap
Input	100 ~ 240 VAC @ 50 - 60 Hz	100 ~ 240 VAC @ 50 - 60 Hz	100 ~ 240 VAC @ 50 - 60 Hz
Power	<75 W Typical	<120 W Typical	<250 W Typical
Physical			
Mounting	19", 2 or 4 Post Rack, 1 RU	19", 4 Post Rack, 1 RU Slide Rails Included	19", 4 Post Rack, 1 RU Slide Rails Included
Dimensions	431 x 44 x 305 mm 19" x 1.75" x 12"	431 x 44 x 468 mm 19" x 1.75" x 18.4"	438 x 44 x 580 mm 19" x 1.75" x 22.8"
Rack Rail Depth	N/A	558 - 927 mm 22" ~ 36.5"	620 ~ 805 mm ¹ 24.4" ~ 31.8"
Weight	4 kg / 8.8 lb	7 kg / 15.4 lb	16 kg / 35.3 lb
Operating Temperature	0 ~ 40 C	0 ~ 40 C	0 ~ 40 C
Regulatory Compliance			
EMC Standards	FCC Part 15 Class A	FCC Part 15 Class A	FCC Part 15 Class A
Safety Standards	CSA/UL 60950-1	CSA/UL 60950-1	CSA/UL 60950-1

¹Optional rear brackets available for mounting unit in shallower racks

²LACP, Active Failover, Round Robin

³Optional 48 (4410, 4420, 4430) or 96 (4420,4430)



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Inca 4400
MODULAR SERIES

LICENSING AND MODULES

Demux				
Output Streams, demux only IP/IP	10x included, upgradeable to 48 (4410/20/30) or 96 (4420/30)			
HARDWARE TRANSCODE MODULE				
Video				
Hardware Based Transcode/Transrate/Downscale	Linear - Up to 12x HD or 30x SD sources Adaptive Bitrate - Up to 24 Profiles			
Codecs	MPEG-2 and MPEG-4 AVC, 4:2:0			
Source Formats	1920x1080i @ 30/25	720x576i @ 25	704x480i @ 30/25	528x480i @ 30/25
<i>Other formats may be supported - please inquire</i>	1280x720p @ 60/50	720x480i @ 30/25	640x480p @ 30/25	
	1280x720i @ 30/25	704x576i @ 25	544x480i @ 30/25	
Output Formats	1920x1080i @ 30/25	720x480p @ 30/25	528x480i @ 30	320x480p @ 30/25
<i>Other formats may be supported - please inquire</i>	1440x1080i @ 30/25	720x404p @ 30/25	480x576i @ 25	320x288p @ 25
	1280x720p @ 60/50	704x576i @ 25/25	480x480i @ 30/25	320x240p @ 30/25
	1280x720p @ 30/25	704x480i @ 30/25	480x480p @ 30/25	320x180p @ 15/12
	960x540p @ 30/25	704x480p @ 30/25	480x270p @ 30/25	200x192p @ 15 (PIP)
	854x480p @ 30/25	640x480p @ 30/25	400x224p @ 30/25	192x192p @ 15 (PIP)
	852x480p @ 30/25	640x360p @ 30/25	384x216p @ 30/25	
	720x576i @ 25	576x324p @ 30/25	352x288p @ 25	
	720x480i @ 30/25	544x480i @ 30	352x240p @ 30/25	
CHASSIS				
Audio Pass-Through				
Audio PID Pass-through	YES			
Audio Transcode				
Source Codecs	AC-3, EC-3, AAC (ADTS & LATM), MPEG-1/2 Audio Layer I/II			
Source Channels	7.1, 5.1, 2.0, 1.0			
Output Codecs	AAC (ADTS & LATM), MPEG-1/2 Audio Layer I/II			
Output Channels	2.0, 1.0			
Subtitles, Closed Captions, Data PIDs				
Closed Captions	EIA 608/708 passed through if present in source			
DVB Subtitle Burn In	YES			
DVB Subtitle PID	Passed through if present in source (can be filtered out)			
Data PIDs	Passed through if present in source (can be filtered out)			
Automatic Service Failover				
Service failover	Automatic fail over to backup source			
Licensed per output	Automatic recovery to primary source			
	Monitor up to 6 parameters in primary source			
	User configurable parameter and duration thresholds			
8VSB / QAM RECEIVER MODULE FRONT END				
Video/Audio Input				
Tuners	4x 8VSB ATSC or DVB-C Annex B QAM			
Input Connectors	4x RF 75 ohm F-Type			
Payload	HD & SD, MPEG-2 & MPEG-4 AVC SPTS/MPTS			
ASI MODULE FRONT END				
Video/Audio Input				
ASI Fixed Input Ports	6			
Input Connectors	6x RF 75 ohm BNC			
Bitrate	Up to 108 Mbps per port			
Payload	HD & SD, MPEG-2 & MPEG-4 AVC SPTS/MPTS			

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