





Powerful Broadcast Encoders

Designed For LPTV Repack

igolgi's iLux | Broadcast mini is a versatile, compact, high quality and reliable ATSC 1.0 encoding platform.

igolgi's iLux | Broadcast Mini is compact, high quality and cost-effective ATSC 1.0 encoding solution specifically designed and configured for the ATSC Repack. iLux includes the highest level of MPEG2 encoding performance for superb video quality along with the industry's most flexible interface support. The iLux Mini scales up to four programs including mixes of HD and SD resolutions and can support compressed or uncompressed source inputs. iLux Mini is feature rich platform that provides a complete ATSC 1.0 Broadcast Station Solution for encoding, Program Guide, Emergency Alert Integration (EAS), hourly station callout, and many more.

iLux Mini is designed specifically for Single SD Program scalable up to four programs with additional software licenses that can be purchased as you grow your program lineup. iLux Mini supports any combination of using SD/HD-SDI input or IP. Included with the basic package is integrated statistical multiplexing which optimizes video quality across all the programs being encoded. In addition, the iLux Mini platform supports dynamic CALM audio loudness control and offers EAS integration through an analog or IP input interface.

Static or Dynamic PSIP is supported. For Dynamic PSIP iLux can integrate with third party PSIP generators or can create the dynamic PSIP information directly.

Simultaneous outputs over ASI and IP are available and enhance the operational value of the iLux. iLux also supports 1+1 redundancy if a hot spare is required with instant failover switching.

The iLux platform is a complete system offering exceptional video processing and advanced software algorithms for the highest quality and fastest throughput. iLux is simple to set up, monitor, and use, and offers a variety of hardware and software configurations appropriate for any broadcast application.

Our value proposition is simple: the highest quality, most flexible product at the best price point.







Fastest Throughput. Highest Video Quality. Most Flexible.



Flexible inputs

iLux encoders offer up to 4 SD/ HD-SDI, ASI, IP or analog inputs. New format? Just swap out a card. iLux is ready for today...and tomorrow.



Flexible outputs

Dual redundant ASI and IP outputs. You won't lose valuable content with iLux.



High quality STATMUX

True multi-pass with no compromise in quality.



Encoding

iLux offers numerous types of selectable video encoding combinations and bit rates. Configurations are user definable and simple to change.



PSIP

iLux supports static PSIP and seamlessly integrated dynamic PSIP with no external server required.



Upgrade to ATSC 3.0

Always an upgrade path, update software and hardware (if required) and you have ATSC 3.0. iLux protects your investment!

Key Features

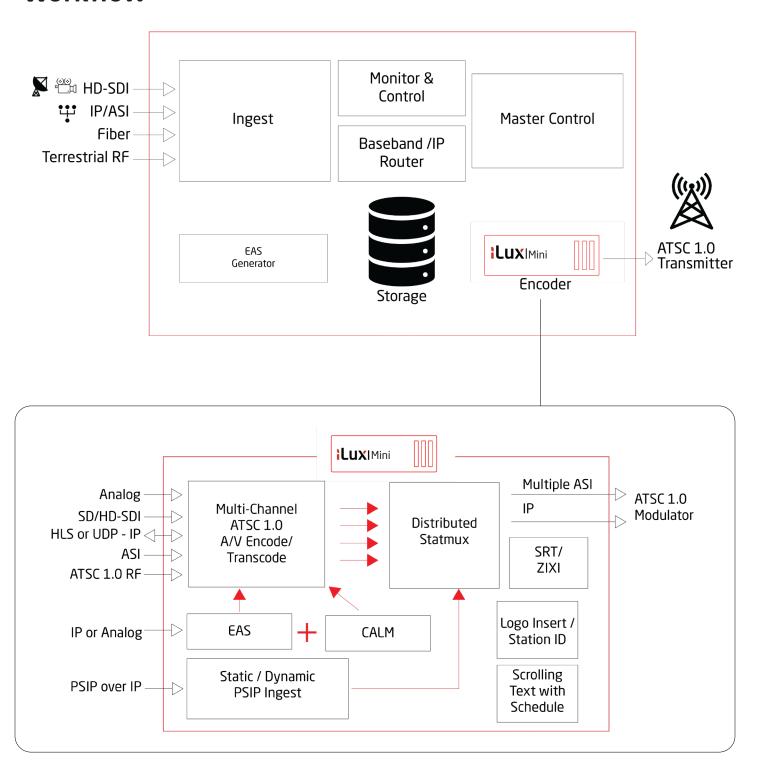
- Flexible multi-channel encoder to fit any station requirement
- Statistical multiplexing with 3 pass MPEG for superior video quality
- Dynamic CALM Act loudness control
- EAS support through analog or IP interface
- Logo insertion
- · Text scrolling feature with full week schedule
- Hourly station callout
- Static or dynamic PSIP modes
- Video scaling and frame rate conversion

- Multiple audio programs per channel
- Full closed captioning compliance
- Fully configurable and flexible web-based management and control
- Customizable software platform ensures easy integration of many optional functions
- SDI, ASI, analog, and IP inputs in any combination
- Simultaneous and redundant IP or ASI outputs
- 1 + 1 redundancy available with instant failover switch
- SNMP for monitoring





Workflow







Specifications

Video

Video MPEG-2 simple, main, and main profile @

Compression high level

Input H.264 Baseline, Main, High

Video MPEG-2 simple, main, and main profile @ Compression high level (HD only)

Compression Output

Video Progressive, Interlace

Processing GOP Structure I only, IPPP, IBBP

Fixed or Adaptive GOP with scene change

detection

Lanczos Cropping/Scaling

MCTF Noise Filtering with strength options

 $Brightness,\, Hue,\, Saturation,\, Contrast$

adjustable per channel

Resolutions and Frame Rates

IP Input 240p, 288p,480p,576p @ 10,12.5,15,20,2 Formats 3.976,29.97,30,50 and 59.94 and 60 Hz

5.976,29.97,50,50 and 59.94 and 60 Hz

Flexible - QCIF @ 23.976, 24, 25, 29.97 and 30 Hz to 4Kp60 1080i x 1920, 1440, 1280 and 960 pixels

@ 23.976, 24, 25, 29.97 and 30 Hz

Common 720p x 1280, 960 and 640 pixels @ Resolutions: 23.976, 24.29.97.30, 50, 59.94, and 60 H

23.976, 24,29.97,30, 50, 59.94, and 60 Hz 1080p x 1920,1440,1280, and 960 pixels

@ 23.976, 24,29.97,30, 50, 59.94, 60 Hz

SDI Input SD: 625i50 (PAL), 525i59.94 (NTSC) Formats HD 1280x720: 720p60, 720p59.94,

720p50, 720p30, 720p29.97, 720p25,

720p24,720p23.98

HD 1920x1080 : 1080i60, 1080i59.94,

1080i50, 1080p30, 1080p29.97, 1080p25, 1080p24, 1080p23.98, 1080psf30, 1080psf29.97, 1080psf25, 1080psf24, 1080psf23.98, 1080p60 A/B,

1080p59.94 A/B, 1080p50 A/B, 1080p60, 1080p59.94, 1080p50.

2K 2048x1080:1080p30,1080p29.97, 1080p25,1080p24,1080p23.98,

1080psf30, 1080psf29.97, 1080psf25, 1080psf24, 1080psf23.98, 1080p60, 1080p59.94, 1080p50, 1080p48,

1080p47.952

Audio

Audio Inputs IP Input Formats

MPEG-1 layer 2

MPEG-2 layer 3 (mp3)

AAC-LC, AAC-HEv1, AAC-HEv2

stereo and 5.1

CVBS

Stereo Audio (dual RCA)

SDI

Multiple programs per channel, configurable SDI audio slots

coundarable 201 andio 2

PCM embedded

Audio Outputs 5.1 or Stereo

Calm Processing and Loudness Control

5.1 Downmix control

bitrate setting per audio program manual dialnorm setting adjustable static volume control adjustable

Transport Processing Inputs

MPEG2-TS Unicast or multicast, SPTS or MPTS over UDP IP or ASI input, VSB, satellite, or QAM

Redundant IP input

HLS Single Profile HLS input

RTP/RTSP

SDI/ CVBS CVBS with Stereo Audio Input

3G-SDI for SD or HD

Scrambling BISS 0/1/E decryption per PID, BISS -CA

FEC SRT input decode

CoPv3 FEC ZIXI

Transport Processing Outputs

MPEG2-TS Unicast or multicast, SPTS or MPTS over UDP IP and simultaneous ASI output

Redundant IP output

FEC SRT input decode

ZIXI





Specifications Continued

Statistical Multiplex

Minimum, Average, and Maximum bitrate configurable per

Mix channels from any clock domain (genlocks unsynchronized inputs)

Overlay Graphics and Text Generator

Station Call Sign Overlay with Scheduling (e.g. once per hour)

Logo Insertion

Scrolling Text Insertion with Scheduling ability

Ancillary data

EIA608 & EIA708 closed captioning embedded on SDI

Program Guide Insertion (PSIP)

Static PSIP Generation

Dynamic PSIP Generation Options

1- Native support (requires PCMP format from guide data service such as Titan)2- IP input for third party generators (Triveni, others)

Emergency Alert System Insertion (EAS input)

IP input from Dasdec generator

CVBS input from Dasdec, Gorman, or Sage generator

Fullscreen or scrolling text modes

Configuration and Management

Web Based User Interface IPMI hardware management SNMP Mibs, downloadable from GUI Channel configuration backup and restore User Interface Login Lockable

Downloadable Logs

Video Thumbnail and Parameter Status

Software Updates

Physical

Dimensions 1U standard chassis: 1.7 x 17.2 x 28.5

28 pounds

Power 400 to 700 Watt power supply depending

on chassis

Environmental Operating Temperature: 10°C ~ 35°C (50°F

Spec. ~ 95°F)

Non-operating Temperature: -40°C to 60°C

(-40°F to 140°F)

Operating Relative Humidity: 8% to 90%

(non-condensing)

Non-operating Relative Humidity: 5% to

95% (non-condensing) Cooling front to back

Redundancy 1+1, N+1 redundancy capable

IP watchdog based redundancy ASI passthrough redundancy option

BackPanel Connectors

Standard 2x Gigabit Ethernet (configurable for input,

Configuration output and system management)

1x 100 bT ethernet (IPMI chassis

hardware management) VGA/USB for KVM

Dual Redundant hot-swap AC Power

Supply

Hardware 1,2,4,8 (SMPTE-424M) (up to 16 SD, 8

HD)

Options

1,4 or 8 CVBS inputs (with stereo audio

connectors) 1,2, or 4 ASI input 1,2, or 4 ASI output

4x 1 Gig Ethernet (copper or SFP+) 2 or 4x 10 Gig Ethernet (copper or SFP+) 1 to 4 SMA (F) 50 ohm ATSC VSB Demodulator Input (4,8,12 or 16 tuners)

1 to 4 SMA (F) 50 ohm Satellite Demodulator Input (1 to 4 tuners)

1 to 4 SMA (F) 50 ohm QAM Demodulator

Input (4,8,12 or 16 tuners)



Our Mission

First and foremost, igolgi is an engineering and development company. Our engineering staff has years of experience in every type of compression and encoding technology, and we are experts in software control and interface. Our principal engineers hold over 200 patents in compression related projects. For over a decade we have provided innovative, flexible, and high-quality solutions for the broadcast, cable, LPTV and government markets.

igolgi is an American company - all development, engineering, production, and support is based in the USA.

As ATSC 3.0, IP, and compression technologies evolve, igolgi is a partner you can count on to ensure every aspect of your design and implementation meets today's needs and is ready for future growth and expansion.

This is our "sweet spot". Let us help you.

Call or email us for a no-obligation discussion of your current and future needs.

Our Promise



Highest Quality.

Our advanced Codecs and optimized software algorithms assure the best quality in any resolution.



Simplest to Use.

Our enhanced user interface makes set up, monitoring, and changes fast and simple.



Most Configurable.

SD. HD-SDI, ASI, IP are all configurable for maximum flexibility.



Easiest Upgrade.

Update the software and change out hardware (if required) to keep you future proofed.



Superior Support.

Our support is USA-based, and our PremierPlus ® gives you 24x7x365 expanded support and service.

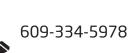


Best Value.

igolgi has it all: technology, flexibility, expandability, and support... at a price that will surprise and please you.

Stay Connected









/company/igolgi-inc/



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