

The iLux | Transport A flexible **Multi-Channel** SRT Gateway



The iLux | Transport Mini



Options: Dual ASI in/out - ATSC 1.0 RF quad tuner

The iLux | Transport 1RU

To transport live video securely and reliably over the public Internet or a private IP network, there is no better solution than the igolgi **iLux | Transport** product family. Getting your media streams from point A to point B securely and reliably can be done in a variety of ways.

The **iLux | Transport** system has demonstrated its reliability for many years, successfully handling thousands of live channels 24/7 for top-tier providers in the cable, satellite, broadcast, IPTV, and OTT sectors.

iLux | Transport supports multichannel SRT. Each channel is independent from the others, and can be SRT input and/or SRT output. In addition, the system is capable of ingesting HLS feeds. The input or outputs can be Multi-Program (MPTS) or Single Program (SPTS). If the input is a MPTS, the iLux Transport can split out each individual channel and provide individual SRT outputs, or can output the complete MPTS without SRT or with new SRT parameters.

You can transfer your signals securely with integrated encryption/decryption for every channel or program.

With the 1RU chassis, you can add dual ASI interfaces that can be used for input or output to route ASI to SRT or SRT to ASI.

With the ATSC 1.0 quad tuner input, you can receive simultaneously 4 ATSC 1.0 multiplexes and SRT the entire ATSC 1.0 Mux or select certain sub channels to send anywhere with SRT for monitoring or other uses.

The iLux Transport supports a large range of potential uses.

Just a few examples:

- Securely transfer point to point a mpts or spts over any network, public or private.
- Securely transfer point to multipoint a mpts or spts to multiple destinations.
- Split out the programs from a MPTS and securely transfer a subset of the programs to 1 or many end destinations.
- Securely transfer ATSC 3.0 STLP to a transmitter site or multiple transmitter sites
- Convert an incoming VBR MPTS or SPTS to CBR and transfer it to any point or multi-point

Two Form Factors

The Mini is a small, rugged, fanless device with four 2.5 GbE ethernet interfaces. This unit is lowpower and completely quiet so can be used on remote locations without concern for background noise. Configurations of 1 or 8 program streams are available. With the 4 physical ethernet ports, connection support to different networks is possible. Also, the management interface can reside on a separate LAN if desired.



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The second form factor is a short depth 1RU chassis with six Gigabit Ethernet links and two 10 Gigabit SFP+. Dual ASI in/out interfaces can be ordered or an ATSC 1.0 quad tuner input. The 1RU is available with configurations of 4, 8, 16, or 32 program services. High bandwidth multiplexes can be supported for reliable routing of services with any mixture of MPTS or SPTS. Additional configurations and program/signal types are available on request.

Since **iLux|Transport** is software-defined, simultaneous functions and system reconfiguration is straightforward, providing a powerful and future proofed system. A convenient Web interface with a very rich and easy to navigate User Interface together with diagnostic and maintenance tools makes for simple set up and management.

The **iLux|Transport** platform is part of the iLux family of igolgi products offering exceptional video processing, transport and advanced software algorithms for the highest quality and fastest throughput. iLux products are all simple to set up, monitor, and use, and offer a variety of hardware and software configurations appropriate for any application.

Our products are designed, manufactured, and tested in the United States with USA-based support. Our value proposition is simple: the highest quality, most flexible products at the best price point.

KEY FEATURES



Reliable Media Transport

- Secure Reliable Transport
- UDP/IP in/out
- SPTS, MPTS in/out
- All Audio/Video formats carried over Transport Streams Supported
- SRT Caller, Listener, Rendezvous modes
- Input: HLS profile selection and ingest



Secure Media Transport

- SRT Native Decryption and Encryption - 128/256 AES
- SPTS or MPTS can be secured
- All Audio/Video Formats carried over Transport can be secured



Multi-Channel

- Up to 32 independent SRT channels
- Split MPTS to SPTS with independent SRT controls



Exceptional Reliability

- 99.999% reliability, systems running 12+ years
- 1:1, N+1 or N+M Redundancy available



Advanced Platform Features

- Fanless, Rugged form factor
- 1RU short depth form factor
- Available as a software license, appliance, or cloud instance



System Adaptability



- Interface to CDNs or other cloud infrastructure
- Low Latency, and configurable to tune SRT for your network conditions

INTUITIVE USER INTERFACE

iLux|Transport is controlled via a feature rich Web Interface which includes real time status information and SNMP MIBs to trap events and alarms.

STATUS: **ACTIVE**

VERSION: 1.6.376

| Channel | Input | Controls | Status |
|-----------|---|---|---|
| Channel 0 |  | <input type="button" value="Start"/> <input type="button" value="Stop"/> <input type="button" value="Restart"/> | STOPPED <input type="button" value="Status"/> <input type="button" value="Log"/> |
| Channel 1 |  | <input type="button" value="Start"/> <input type="button" value="Stop"/> <input type="button" value="Restart"/> | RUNNING <input type="button" value="Status"/> <input type="button" value="Log"/> |

STATE
UP TIME
RESYNC COUNT
PROC

ACTIVE
7h 28m 9s since last re-sync
0
3748

STATUS
SIGNAL ACTIVE
SOURCE
INTERFACE
TRANSPORT
STREAM
PROGRAMS

CONNECTION ESTABLISHED!
SPTS SPLIT
IP (239.254.5.211:21100) @ 19.39 mbps

ID: 1001



2

OUTPUT 0
SRT SNDRATE 0
SRT MAXBW 0
SRT SNLOSS 0
SRT RETRANS 0
SRT RTT 0
SOURCE IDENTITY
0
STATS 0
VIDEO 0
MPEG2 (1920 x 1080) ON PID:81 @ 29.97 fps : 13.40 mbps
ASPECT 0
METADATA
AUDIO 0 (2)
AUDIO 0 (3)

SRT LISTENER - IP (127.0.0.1:9200:lo)
14.78Mbps
8589.93Mbps
0
0
0.03ms
NBC5
UDP:171
16:9
CAPTIONS:1 AFD:1 BAR:0
AC3 (- 2) ON PID:84 @ 389.06 kbps
AC3 (- 2) ON PID:85 @ 193.05 kbps

OUTPUT 1
SRT SNDRATE 1
SRT MAXBW 1
SRT SNLOSS 1
SRT RETRANS 1
SRT RTT 1
SOURCE IDENTITY
1
STATS 1
VIDEO 1
MPEG2 (704 x 480) ON PID:97 @ 29.97 fps : 3.33 mbps
ASPECT 1
METADATA
AUDIO 1 (2)

SRT LISTENER - IP (127.0.0.1:9200:lo)
3.31Mbps
8589.93Mbps
0
0
0.03ms
NONSTOP
UDP:169
16:9
CAPTIONS:1 AFD:1 BAR:0
AC3 (- 2) ON PID:100 @ 195.34 kbps

| | | | |
|-----------|---|---|---|
| Channel 2 |  | <input type="button" value="Start"/> <input type="button" value="Stop"/> <input type="button" value="Restart"/> | RUNNING <input type="button" value="Status"/> <input type="button" value="Log"/> |
| Channel 3 |  | <input type="button" value="Start"/> <input type="button" value="Stop"/> <input type="button" value="Restart"/> | RUNNING <input type="button" value="Status"/> <input type="button" value="Log"/> |

Channel 0 Channel 1 * Channel 2 Channel 3

Input

Input Interface : IP
SRT Mode : Off
Source NIC : eth2
Source IP Address : 239.254.5.211
Source Port : 21100
Multicast IGMPv3 Source IP : (blank = disabled)

Output

Output Format : UDP Splitter Mode : SPTS

| Program | | Streams | | Output | | | | CBR | SRT | | | | | |
|---------|-----|---------|-----|--------|------------------------------------|-----|-----------|------|------|---------------------------------------|----------|---------|------------|--------------|
| Name | Num | PMT PID | PID | Type | Codec | NIC | Address | Port | PMT | Mode | Local IP | Latency | Bandwidth | OH Bandwidth |
| NBC5 | 5 | 80 | 80 | PMT | PMT | lo | 127.0.0.1 | 9200 | Pass | Mode: Disabled Max Bitrate (kbps): | Listener | 100ms | blank=auto | 25% |
| | | | 81 | Video | MPEG2 1920x1080@29.97 fps (16:9) | | | | | | | | | |
| | | | 84 | Audio | AC3 @ 393.65 kbps (1 5.1 channels) | | | | | | | | | |
| | | | 85 | Audio | AC3 @ 198.33 kbps (1 2.0 channels) | | | | | | | | | |
| NONSTOP | 6 | 96 | 96 | PMT | PMT | lo | 127.0.0.1 | 9205 | Pass | Mode: Disabled Max Bitrate (kbps): | Listener | 100ms | blank=auto | 25% |
| | | | 97 | Video | MPEG2 704x480@29.97 fps (16:9) | | | | | | | | | |
| | | | 100 | Audio | AC3 @ 198.33 kbps (1 2.0 channels) | | | | | | | | | |

SPECIFICATIONS

Transport Processing Inputs

MPEG2-TS over UDP Unicast or Multicast
SPTS or MPTS UDP/IP

SRT Caller, Listener and Rendezvous modes
SPTS or MPTS
AES 128 or AES 256
Configurable latency and SRT parameters

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Physical

Dimensions 1U Chassis: 430(W) x 252(D) x 44(H) mm
Mini Chassis: 125(W) x 109(D) x 39.5(H) mm

Power 1u Chassis: 250W power supply
Mini Chassis: 40W power

Environmental Specification 1U Chassis
Operating Temperature: 0 ~ 50°C
Storage Temperature: -40 ~ 85°C
Humidity: 10% ~ 95% @40°C (non-condensing)

Mini Chassis
Operating Temperature: -20 ~ 60°C
Storage Temperature: -40 ~ 85°C
Humidity: 10% ~ 95% @40°C (non-condensing)



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 reliable open Internet transport technologies evolve and mature, 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 Reliability

Our transport processors have carrier grade four 9s reliability.



Simplest to Use

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



Most Configurable

VSB, QAM, Satellite or IP inputs 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

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