AGB240 ASI to Gigabit Ethernet Bridge

Migrate legacy ASI video outputs to an IP backbone

PRODUCT OVERVIEW

The ARRIS AGB240 ASI to Gigabit Ethernet (GigE) Bridge enables service providers to cost-effectively migrate legacy ASI video equipment to IP networks in headend environments. The AGB240 delivers highly-reliable bridging of traffic from ASI video service outputs in legacy equipment, such as satellite receivers (IRDs), encoders, and CherryPickers®, to a common GigE IP backbone or transport network. This simple, standalone solution also provides significant power savings to service providers by using 90 percent less power than alternative solutions.

ASI inputs typically carry either pure TS payload or TS with null stuffing. For example, if the AGB240 has inputs of 54 Mbps streams with null stuffing, it can be configured to operate in two modes. In null-stripping mode, up to twenty-four (24) inputs with TS payload of no more than 38.8 Mbps can be bridged. The AGB240 will strip nulls, recalculate the PCR for each stream, and output all TS on the GigE interface. In pass-through mode, the AGB240 can accept up to seventeen (17) 54 Mbps streams with a combined output of 918 Mbps on the GigE interface.

The front panel of the AGB240 includes an at-a-glance LED status for all major functions, as well as the access point for the payload GigE port, the Fast Ethernet 10/100Base-T control ports, and the ASI monitor port. The LEDs include individual LEDs for each of the twenty-four ASI inputs, a power-supply status LED, plus the Ethernet status LEDs. Both control ports can be active simultaneously providing a redundant, dual-path access to the unit for remote diagnostics. The GigE port provides a single port for IP payload output. The user can also select whether to connect the AGB240 to the IP backbone via copper (included) or optical SFP.

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PRODUCT FEATURES

- Maps up to 24 MPEG-2 TS from ASI to IP
- 931 Mbps aggregate bridge bandwidth
- Less than 20W maximum power draw
- Mounts in 1RU
- 24 ASI input ports
- Extended reach ASI cables up to 1,000 feet/300 meters
- Front panel ASI monitor port
- Choice of copper (included) or SFP GigE connection
- Redundant, internal power supply; unit runs on single power supply
- Built-in surge protection
- Rear panel grounding lugs
- Dual 10/100Base-T Ethernet ports for redundant control path
- Web-based user interface for easy setup and diagnostics
- Basic SNMP agent
- Front panel LEDs for at-a-glance diagnostics

SPECIFICATIONS

ASI Input

24 rear-mounted ASI input ports

BNC female connector

Input impedance : 75 Ω

Individually configure as receiver or muted

Coax cable length up to 1,000 feet/300 meters

MTS Stream Processing

Up to 213.73 Mbps per ASI input

188-byte MPEG-2 TS packets in burst or byte mode

Input MTS can be CBR or VBR

Video/audio MTS bit-rate from 192 Kbps to 213.73 Mbps

Data MTS bitrate from 192 Kbps to 213.73 Mbps

Auto packet drop if configured MTS rate is exceeded

Gigabit Ethernet Output

One configurable GigE output; either RJ-45 (included) or SFP

931.45 Mbps aggregate Ethernet payload output

Latency from time of ASI arrival to GigE output: 100 µ seconds

IEEE 802.3 compliant

Up to 24 MPEG-2 TS output over UDP

Maximum bitrate of each MTS output is the configured rate

IPv4 Source/Dest address and Source/Dest UDP address

IPv4 Dest address can be multicast

10/100 Ethernet Control

Dual RJ-45 connectors provide option for redundant control path

Static IP address (default) or DHCP

Recessed IP reset switch on front panel restores IP address or netmask to default

UI includes administration, configuration, monitor, and status

Supports firmware updates

Non-volatile storage of factory firmware and one working firmware image

Non-volatile configuration storage

Non-volatile storage of 200 most recent events

Basic SNMP Agent provides device identity information, status, and SNMP traps

Internal clock or SNTP

ASI Port Monitor

One (1) front-mounted ASI monitor port

BNC female connector

Input Impedance: 75 Ω

Monitor any MPEG-2 TS immediately after receiving at ASI input

Monitor any MPEG-2 TS immediately before transmitting at Gigabit output

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Physical

Width	19-in (48.26 cm), mounts in 19-in rack
Depth	12.75-in (32.39 cm), including connectors
Height	1.75-in (4.45 cm), mounts in 1RU space
Mounting weight	Six pounds (6 lbs)
Power input	90-264 VAC, 47-63Hz, 20 W max
Redundant, internal power supply; unit operates on single power supply	
Internal surge protector	
Operating temperature	0 °C to 50 °C
Operating humidity	5 to 95%, relative maximum
Operating altitude	−200 feet to 10,000 feet AMSL
Storage temperature	−40 °C to 70 °C
LEDs	24 ASI inputs (one for each port), Fast Ethernet 10/100Base-T control, GigE outputs (one for each port), and power supply status
Dual-lug chassis ground on rear panel	

Regulatory

Electromagnetic Compatibility (EMC)

US	FCC Part 15 Class A
Canada	ICES-003 Class A
European Union (EU) - CE Mark	EN 55022:2006/A1 Class A Emissions, EN 55024 Immunity
Australia	C-Tick Mark
Other nations	CISPR 22 Class A Emissions

Safety

US/Canada	UL Listed to UL 60950-1 Second Edition
European Union(EU) - CE Mark	EN 60950-1 Second Edition
Argentina	UL-AR / S-Mark
Other nations	CB Scheme Certificate IEC 60950-1 Second Edition

Ordering

AGB240 24-port ASI to Gigabit Bridge	Part #573546-001-00
850nm SFP	Part #551742-002-00
1310nm SFP	Part #551755-001-00
1550nm SFP	Part #551767-001-00
1000bT (copper) SFP	Part #551771-002-00

For more information regarding any of these features, please contact your ARRIS sales representative

CUSTOMER CARE

Contact Customer Care for product information and sales:

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www.arris.com