

## FEATURES

- DVB compliant
- ASI or TS/IP output versions
- Linux-based O/S
- Remote monitor/configuration using Web browser interface
- TCP to UDP tunnel support
- IRD firmware update carousel support
- Reliable operation; fully solid state (no hard drive)
- Automatic redundancy and failover support
- Supports MPE and ULE
- DVB Data Piping - Asynchronous data

## IP ENCAPSULATOR IPE-4000A

MPEG-2 DVB Encapsulator

Providing the necessary link between IP networks and broadband DVB networks, the **IP Encapsulator (IPE) 4000A** enables cost effective point-to-multipoint content delivery.

The **IPE-4000A** is a solid state, fully embedded, Linux-based IP Encapsulator. The IPE receives IP packets from an Ethernet connection and encapsulates selected packets into an MPEG-2 transport stream per DVB specifications. Once the IPE has encapsulated the data, it forwards the data packets based on the user configurations. The output transport stream can then be forwarded to a multiplexer or directly to a modulator for high performance and cost saving transmission of IP data over cable, satellite or terrestrial networks.

### License Based Performance

- Field upgradeable performance via software license

### Flexible Configuration and Management

- Web-based GUI for ease of use
- SNMP remote configuration and management support
- Front panel LCD with navigation keys

### DVB-S/S<sub>2</sub> Support

- High performance, scalable and future proof
- Enhances bandwidth efficiency

### SMPTE 325M Support ASI Output version only

- Supports a standards-based feedback loop from a compliant multiplexer for opportunistic data insertion
- Variable data rate encapsulation to enable filling all available space in an existing MPEG Transport Stream

### Guaranteed Interoperability

- Internet standard Quality of Service (QoS) — Type of Service (TOS) bits located in IP packet headers
- Conforms to DVB data broadcast standards
- Compatible with IDC's Datacast XD™ Host server for guaranteed file delivery and the MAP, S400 and SuperFlex® Pro Series™ Receivers.

### Dependable Redundancy Support

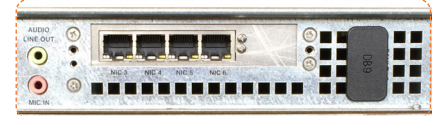
- Support for 1:1 redundancy with minimal switching strategy
- Redundant pair share a virtual IP address
- Standby unit automatically assumes active role in the event of a failure
- Support for chain redundancy schemes
- Contact closure on fault for external switch (component redundancy)

Front Panel





Rear Panel: ASI version



Rear Panel (option): TS/IP version

MODEL	
5 Mb/s	Maximum Output Rate, 1 RU DVB Encapsulator
20 Mb/s	Maximum Output Rate, 1 RU DVB Encapsulator
40 Mb/s	Maximum Output Rate, 1 RU DVB Encapsulator
80 Mb/s	Maximum Output Rate, 1 RU DVB Encapsulator
130 Mb/s (ASI output version only)	Maximum Output Rate, 1 RU DVB Encapsulator
200 Mb/s (ASI output version only)	Maximum Output Rate, 1 RU DVB Encapsulator
DATA THROUGHPUT CONFIGURATIONS	
IP Packet Throughput	40,000 PPS
Number of PIDs	8192
IP Data Format	MPE DSM-CC datagram sections (EN 301 192 compliant) and ULE
Async Data Format	DVB Data Piping (RS-232 200, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 b/s)
Section Packing	Selectable per PID
Firmware Carousel	Selectable bit rate; MP2TS file
Input Interface	10/100/1000 Base-TX
SNMP	SNMPv2 MIB-II
IGMP	Version 2
PSI Tables	PAT, PMT, NIT, TDT, INT
OUTPUT INTERFACE	
DVB-ASI (ASI version)	<ul style="list-style-type: none"> <li>• Max Data Rate: 200 Mb/s</li> <li>• Connectors: BNC (2)</li> </ul>
IP Output (TS/IP version)	<ul style="list-style-type: none"> <li>• 4 x Ethernet GBE</li> <li>• RTP format TSP/IP output suitable for ST2022-7 redundancy applications</li> <li>• Max Data Rate: 100 Mb/s</li> </ul>
SMPTE 325M, ASI Output version only (bi-directional)	<ul style="list-style-type: none"> <li>• Max Data Rates: 200 Mb/s</li> <li>• Connectors: BNC (2)</li> </ul>

NETWORK SPECIFICATIONS	
IP Interfaces	Dual 10/100/1000 Base-TX Ethernet ports (RJ-45)
Async Data Interfaces	Two RS-232 DB-9(M)
POWER REQUIREMENTS	
Supply Voltage	85 to 250 VAC, 50 or 60 Hz autosensing
Power Consumption	<100 Watts
PHYSICAL PARAMETERS	
Chassis	1RU rackmount
Dimensions (H, W, D)	4.5 cm x 43.2 cm x 40.6 cm (1.75" x 17" x 16")
Weight	9.53 kg (21 lbs.)
ENVIRONMENTAL CONDITIONS	
Operating Temperature	0° to 45° C (32° to 113° F)
Humidity	5% - 95% non-condensing
Shock	3.5 g @ 10 ms duration
Vibration	0.5 g @ 22-10 Hz
Air flow	Front to back
COMPLIANCE	
CB, CE, FCC, RoHS, UL/cUL	