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270Mb/ASI/SDI to Gigabit Ethernet Network Interface Adapter Type MEM-4660
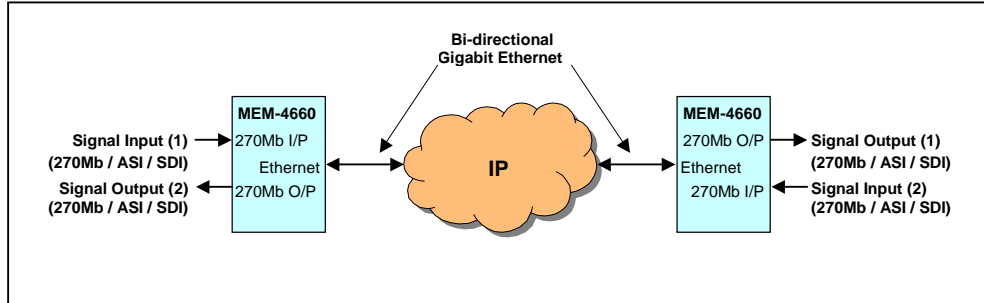
Application Diagram:

Features:

- **270Mb/ASI/SDI to Gigabit Ethernet to 270Mb/ASI/SDI conversion**
- **Set up as either transmitter, receiver or both (transceiver)**
- **Supports enabling of Forward Error Correction (FEC)**
- **IP de-jittering**
- **RTP encapsulation**
- **SNMP setup and control**

General:

The MEM-4660 acts as a gateway between a 270Mb/s ASI or SDI, and a Gigabit Ethernet network environment.

The MEM-4660 is designed to operate as a pair with one unit at each end of the link. The unit can be set up to act as a transmitter or receiver for uni-directional operation, or as a transceiver (transmitter and receiver) for bi-directional operation.

It is also possible to use multiple units at multiple locations to receive from a single transmitting unit.

All parameters are set and read via a Simple Network Management Protocol (SNMP) system. As such the MEM-4660 must be operated, or at least set up, in one of IRT's frames fitted with SNMP capability.

Forward Error Control (FEC) can be enabled or disable on the transmitter with a 4/5 Length/Depth setting.

The Gigabit Ethernet port has automatic MDI/MDI-X detection. This detects whether the Ethernet interconnect cable is a straight through or cross over type and automatically switches itself to accommodate.

The MEM-4660 is designed to fit IRT's current Eurocard 1RU and 3RU frames fitted with SNMP control.

MEM-4660 Technical Specifications

Input

Type	1 x 270Mb/s, ASI or SDI, BNC connector.
Impedance	75 Ohm.
Return Loss	>15 dB 5 MHz to 270 MHz.
Equalisation	<300 metres at 270 Mb/s for Belden 8281 or equivalent cable.

Ethernet

Type	Standard IEEE 802.3
Data Rate	1 Gb/s
Connector	RJ-45

Output

Type	1 x 270Mb/s, ASI or SDI (dependent on source unit), BNC connector.
Signal level	800 mV ± 10%
Impedance	75 Ohm.
Return loss	>15 dB 5 MHz to 270 MHz.

Alarm

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General Alarm	Short to ground circuit on loss of Input (on transmitter), loss of RTP (on receiver), or link loss.

Front Panel Indicators

270Mb	270Mb ASI or SDI connected – Green (Transmitter unit)
Link	LAN Activity - Green
RTP Rx	RTP packets received – Green (Receiver unit)
FEC Rx	Forward Error Correction packets received – Green
Alarm	General Alarm present - Red

Power Requirements

	28 Vac CT (14-0-14) or ±16 Vdc
Power consumption	<5 VA.

Other

Temperature range		0 - 50° C ambient
Mechanical		Suitable for mounting in IRT 19" rack chassis with input, output and power connections on the rear panel
Finish	Front panel	Grey, silk-screened black lettering & red IRT logo
	Rear assembly	Detachable silk-screened PCB with direct mount connectors to Eurocard and external signals
Dimensions		6 HP x 3 U x 220 mm IRT Eurocard
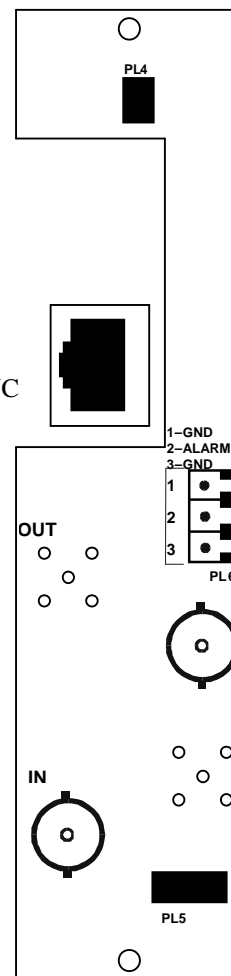
Due to our policy of continuing development, these specifications are subject to change without notice.