

2 Mb/s (E1) G.703 / ASI Network Interface Adapter

FEATURES

- 2 Mb/s (E1) G.703 input to ASI output.
- Selectable ASI program number.
- ASI input to 2 Mb/s (E1) G.703 output.
- AIS signal generated when no input is present.

GENERAL

The MDC-3661 takes a 2048 kb/s G.703 (E1) signal and packs it as private data into a DVB compliant, 188 or 204 byte (selectable), ASI transport stream. On board switch settings set the ASI program number to a choice of 8 settings. This allows it to pass through ASI style of circuits such as IRT's ASI Mux/DeMux and fibre modules as well as ASI statistical multiplexers.

The MDC-3661 will also simultaneously decode an appropriate ASI input into 2048 kb/s G.703 (E1).

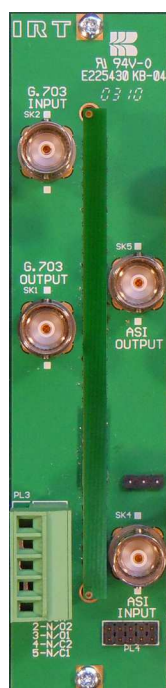
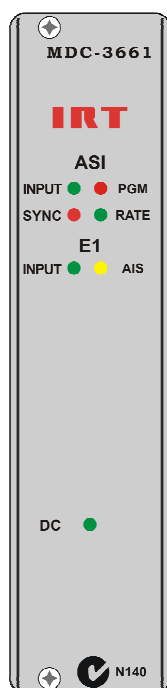
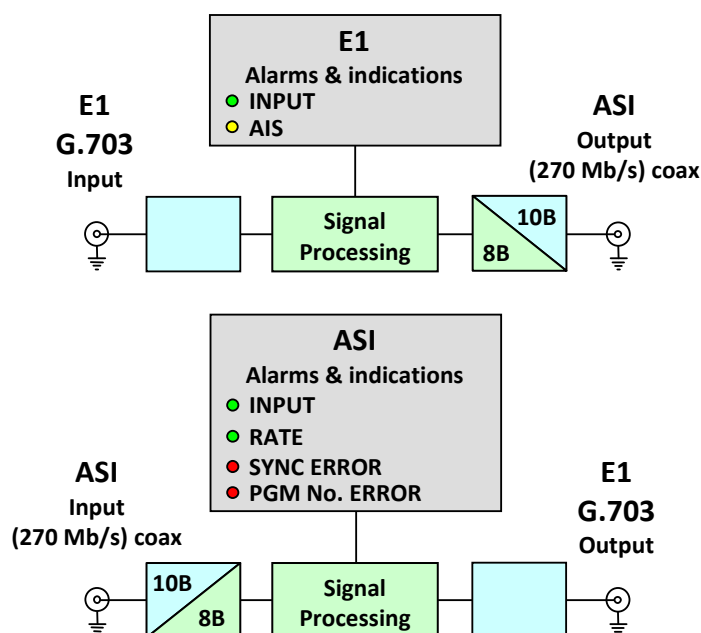
In the absence of an ASI input, the G.703 output is AIS (Alarm Indication Signal). In the absence of a valid G.703 input, AIS is packed into a 188 or 204 byte (selectable) ASI transport stream.

For the G.703 input, front panel LEDs indicate if a G.703 input is present and if it is AIS. For the ASI input, front panel LEDs indicate if the ASI is present, if the ASI is at the correct input rate, if there is a sync error, or if the program number of input signal is missing or does not match the on board switch setting.

External relay contact alarms also are available on the rear connector assembly.

The MDC-3661 is suitable for mounting in all IRT's standard 1RU and 3RU frames.

BLOCK DIAGRAM MDC-3661 SIGNAL PATH



TECHNICAL SPECIFICATIONS

Input 1:

Type	1 x G.703.
Electrical characteristics	HDB3 encoded.
Data rate	2048 kb/s (E1).

Output 1:

Type	1 x ASI-C, 75 Ω , 188 or 204 Byte (selectable), (distributed).
Data Rate	2.831 Mb/s for 188 byte, or 3.072 Mb/s for 204 byte (nominal).
Impedance	75 Ω
Level	800 mVp-p.
Program Number	Selectable from 3661 (0E4D) to 3668 (0E54)

Input 2:

Type	1 x ASI-C, 75 Ω , 188 or 204 Byte (distributed or contiguous).
Data rate	2.831 Mb/s for 188 byte, or 3.072 Mb/s for 204 byte (nominal).
Return Loss	>15 dB 5 MHz to 270 MHz.
Equalisation	Automatic, better than 300 metres at 270 Mb/s for Belden 8281 or equivalent cable.
Program Number	Selectable from 3661 (0E4D) to 3668 (0E54).

Output 2:

Type	1 x G.703.
Electrical characteristics	HDB3 encoding.
Data Rate	2048 kb/s (E1).

Alarms:

2 x general alarm	<ul style="list-style-type: none"> - Relay 1 releases on ASI Sync loss, incorrect ASI rate, incorrect program number, or power loss. - Relay 2 releases on G.703 input loss, or power loss. 2 set relay contacts - N/O1, N/C1, N/O2, N/C2, Com. 5 pin phoenix style connector.
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Power Requirements:

Voltage	28 Vac CT (14-0-14) or \pm 16 Vdc.
Power consumption	< 4 VA.

Other:

Temperature range	0 - 50° C ambient.				
Mechanical	For mounting in IRT 19" rack chassis with input, output and power connections on the rear panel.				
Finish	<table> <tr> <td>Front panel</td> <td>Grey background, black lettering & red IRT logo.</td> </tr> <tr> <td>Rear assembly</td> <td>Detachable silk-screened PCB with direct mount connectors to Eurocard and external signals.</td> </tr> </table>	Front panel	Grey background, black lettering & red IRT logo.	Rear assembly	Detachable silk-screened PCB with direct mount connectors to Eurocard and external signals.
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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.				