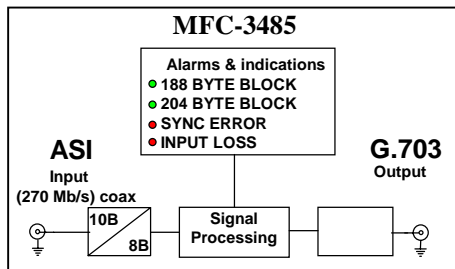
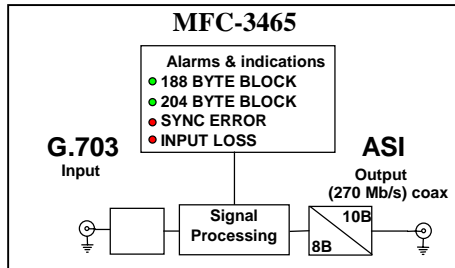


### Functional diagrams:



### Features:

- Input rate stuffing to G.703 rates.
- Modular format compatible with IRT fibre optic, distribution amplifier and switcher modules.

### Applications:

- Conversion of DVB ASI to G.703, and for transport via Telecom circuits.
- Interfacing various MPEG2 TS formats.
- Block length indication and error detection.

### General:

The MFC-3485 and MFC-3465 are part of a family of data transcoders for converting between the commonly used MPEG2 Transport Stream formats in the broadcast industry for video distribution.

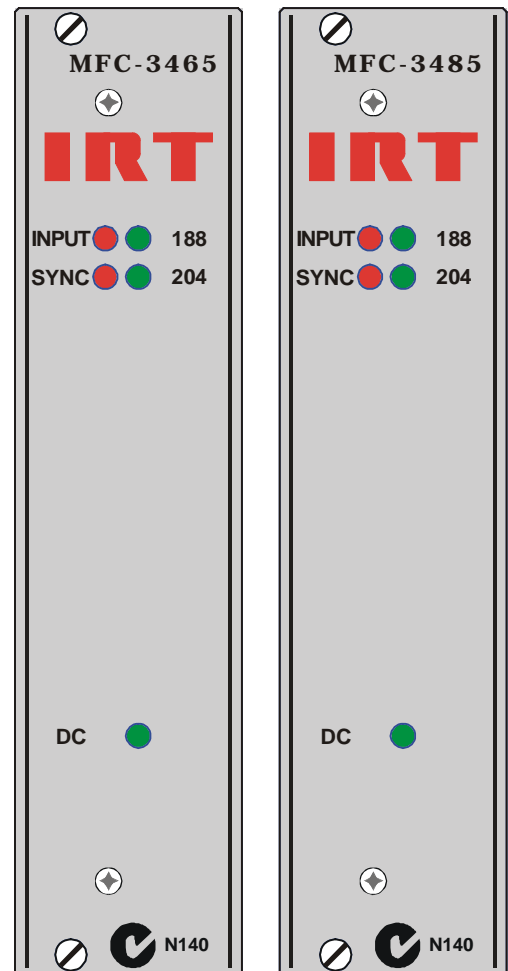
Any ASI input with a payload data rate within the range of 1.5 to 39 Mb/s will be converted to a B3ZS encoded 44.736 Mb/s unformatted data stream by the MFC-3485/45. The output shape may be either "High" or "Low".

The MFC-3465/45 provides the complementary conversion from a data payload within a 45 Mb/s B3ZS G.703 stream to ASI format.

For HDB3 34.368 Mb/s rates the MFC-3485/34 and MFC-3465/34 may be used. These accommodate data payloads in the range of 1.5 to 30 Mb/s.

The transmitted streams are padded up to the required transmission rate with bytes of a unique pattern, which are removed at the receiver so that the original ASI payload rate is restored.

In the absence of a valid MPEG ASI input the MFC-3485 will transmit "all ones".



# MFC-3485 & MFC-3465 Technical Specifications

(Preliminary)

## MFC-3485/45:

<b>Input:</b>	1 x ASI-C, 75 $\Omega$
Data rate	<39 Mb/s
Return Loss	>15 dB 5 MHz to 270 MHz
Equalisation	Automatic, better than 200 metres at 270 Mb/s for Belden 8281 or equivalent cable.
<b>Output:</b>	1 x G.703
Electrical characteristics	B3ZS encoding
Data Rate	44.736 Mb/s
Output Level	High or Low

## MFC-3465/45:

<b>Input:</b>	1 x G.703.
Electrical characteristics	B3ZS encoded.
Data rate	44.736 Mb/s
<b>Output:</b>	1 x ASI-C
Impedance	75 $\Omega$
Level	800 mVp-p.
Added PCR Jitter	Less than 200nS.

## MFC-3485/34:

<b>Input:</b>	1 x ASI-C, 75 $\Omega$
Data rate	<30 Mb/s
Return Loss	>15 dB 5 MHz to 270 MHz
Equalisation	Automatic, better than 200 metres at 270 Mb/s for Belden 8281 or equivalent cable.
<b>Output:</b>	1 x G.703.
Electrical characteristics	HDB3 encoding
Data Rate	34.368 Mb/s

## MFC-3465/34:

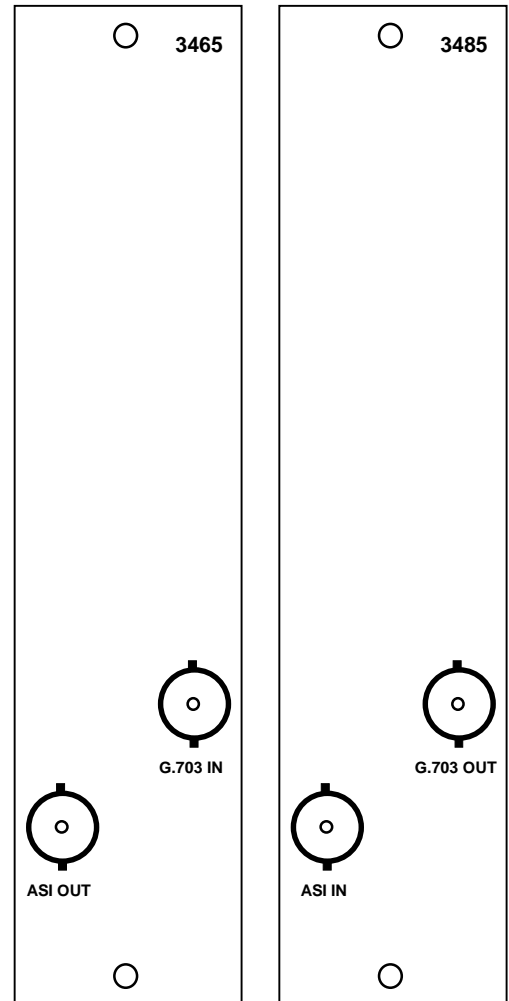
<b>Input:</b>	1 x G.703.
Electrical characteristics	HDB3 encoded.
Data rate	34.368 Mb/s
<b>Output:</b>	1 x ASI-C
Impedance	75 $\Omega$
Level	800 mVp-p.
Added PCR Jitter	Less than 240nS.

Connectors	BNC
Power Requirements	28 Vac CT (14-0-14) or $\pm$ 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 background, 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.
Supplied accessories	Rear connector assembly.
Related products	<a href="#">DDC-3460</a> - G.703 to SPI, ASI. <a href="#">DVT/R-3210</a> ASI fibre optic link.
Optional accessories	TME-6 module extender card.

**Due to our policy of continuing development, these specifications are subject to change without notice.**



## Detailed specifications available from:

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