

Features:

- Standard 75 Ω ASI-C input
- 188 to 204 byte packet conversion
- Rate independent from 1.5 Mb/s to 50 Mb/s
- Automatic Reed Solomon encoding
- Interleaving and Energy Dispersal (Scrambling)
- Two ASI outputs plus serial to parallel conversion for output as SPI
- Automatic input equaliser to >250 m
- IRT Eurocard format

Applications:

- ASI conversion for transport via Telecom links
- Connection to IRT's QPSK modulator for transport via analogue microwave links
- Connection to products requiring SPI inputs

General:

The DDC-3335 is part of a family of data transcoders for converting between the commonly used MPEG2 Transport Stream formats in the broadcast industry for video distribution.

The DDC-3335 accepts any ASI input data rate within the range of 1.5 Mb/s to 50 Mb/s.

The DDC-3335 accepts either a 188 or 204 byte packet format ASI signal. For a 188 byte packet ASI input, Reed Solomon check bytes are automatically added to convert the signal to a 204 byte packet signal. For a 204 byte packet ASI input, existing RS check bytes are over-written.

Interleaving and Energy Dispersal (Scrambling) of the signal is also performed. These two functions may be disabled by the insertion of on board links.

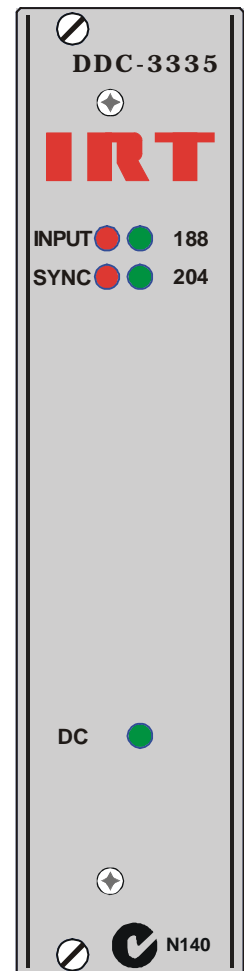
188 to 204 byte conversion & RS encoding are also link enabled/disabled. Disabling 188 to 204 byte conversion disables RS insertion and interleaving automatically.

Two ASI and 1 SPI outputs conforming to the DVB standard are provided.

The addition of RS encoding and optional Interleaving and Scrambling make the DDC-3335 suitable for preparing an ASI signal for transport over Telecom type lines or, in conjunction with IRT's MDT-3510 QPSK modulator, microwave links.

The signal is also monitored for MPEG2 transport stream sync errors and provides front panel LED indications for input packet byte length, loss of input and loss of sync. Alarm relay contacts are also provided on the rear connector for remote monitoring of alarm status.

The DDC-3335 is fabricated in IRT's standard Eurocard format and may be housed in a variety of IRT Eurocard frames alongside other standard modules.



DDC-3335 Technical Specifications

Input:

Type	1 x ASI-C
Input byte packet length	188 or 204 byte
Impedance	75Ω.
Connector	BNC.
Return Loss	>15 dB 5 MHz to 270 MHz
Equalisation	Automatic, better than 250 metres at 270 Mb/s for Belden 8281 or equivalent cable.

ASI-C Output:

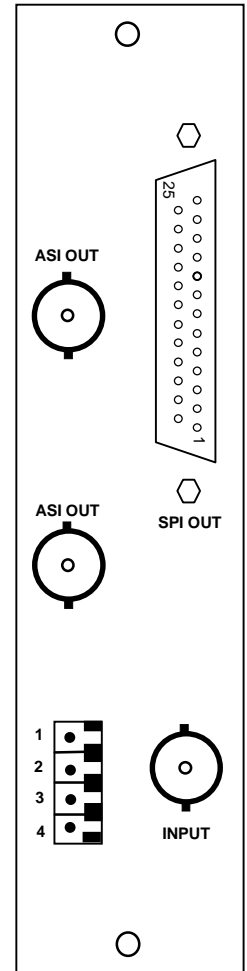
Number	2
Output byte packet length	188 byte / 204 byte (link settable)
Impedance	75Ω.
Level	800 mVp-p.
Connector	BNC.

SPI Output:

Number	1 (Conforming to the DVB standard)
Electrical characteristics	LVDS drivers.
Connector	25 pin 'D' female.

Other:

Power requirements	28 Vac CT (14-0-14) or ± 16 Vdc.
Power consumption	<7 VA.
Temperature range	0 - 50° C ambient.
Connectors	Phoenix plug in terminal blocks unless otherwise noted.
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	30 mm x 3 U x 220 mm IRT Eurocard.
Accessories supplied with module	Rear connector assembly including matching connectors for audio, alarms and controls.
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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