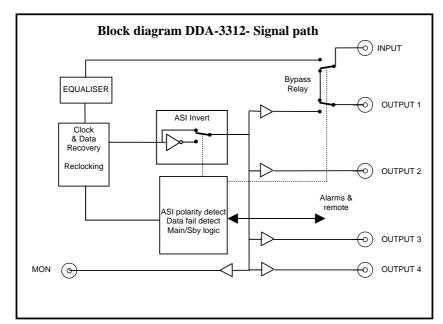


## ASI/SDI Path Protection Amplifier Type DDA-3312





## **Features:**

- SDI & DVB-ASI compliant.
- Adaptive cable input equalisation.
- Data regeneration.
- Polarity alarm and inversion capability for ASI.
- Protection switching capability.
- Power fail signal bypass.
- External Alarms.
- Compatible with other IRT Eurocard modules and frames.

## General:

The DDA-3312 is a data distribution amplifier that may be used with either ASI or SMPTE SDI 270 Mb/s signals.

Four outputs are provided at the rear of the module with an additional output for monitoring purposes on the front panel. The primary output is controlled by relays to provide a bypass signal from the input during a power failure.

The DDA-3312 incorporates a protection facility for switching two outputs to signals from a companion DDA-3312 when a fault is detected.

In SDI mode a loss of input or EAV is used to indicate failure.

In ASI mode a loss of input or absence of 188/204 byte packet sync is used.

In both modes an overriding changeover request may be made either locally or by remote control. Indicators are provided on the front panel for:

SDI signal detected

ASI signal detected

ASI signal inverted

Data loss

Module in service

Module in standby

External alarm signals are also available on the rear of the module.

Changeover-inhibit and changeover-request switches are provided on the front panel for use where modules are linked in pairs for redundancy.

For this configuration, a special double width rear assembly (type ZDA-3311RH) is required to link the signal and logic sections of two modules.

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## **DDA-3312 Technical specifications**

**ASI/SDI** input:

Number 1. Impedance 75  $\Omega$ .

Return loss >15 dB 5 MHz to 135 MHz.

Equalisation Automatic, better than 200 metres at 270 Mb/s for Belden 8281 or

equivalent cable.

**ASI/SDI** outputs:

Number 2 switched, and 2 unswitched outputs located on rear assembly and one

located on front panel.

Type Reclocked.

Level 800 mV  $\pm$ 10% into 75  $\Omega$ . Return loss >15 dB 5 MHz to 135 MHz.

DC offset Nil.

Impedance 75  $\Omega$  source terminated.

**Performance:** 

Rise time <1.0 ns, (700 ns typically).

Residual jitter <200 ps, (150 ps typically) at 270 Mb/s.

Controls & alarms: General alarm. Relay contact closure to Gnd on fail.

Signal fail. Relay contact closure to Gnd on fail.

Changeover request. Contact closure to Gnd.

**Connectors:** ASI/SDI: BNC.

Alarm: Krone LSA plus.

Other:

Power requirements 28 Vac CT (14-0-14) or  $\pm$  16 Vdc.

<5.5 VA

Temperature range 0 - 50° C ambient.

Mechanical Suitable for mounting in IRT 19" Eurocard rack chassis with input

output 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 31 mm x 3 U x 220 mm IRT Eurocard. Standard accessories DDA-3312 rear connector assembly.

Optional accessories Instruction manual.

ZDA-3311RH double rear assembly, for handshake connection of two DDA-3310's.

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

**Detailed specifications available from:** 

**Local Agent:** 

Manufacturer: IRT Electronics Pty Ltd

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O/P 2

INPUT

O

3312

O/P 3

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