

### Features:

- **G.703 compliant<sup>1</sup>.**
- **Versions for 8, 34 or 45 Mb/s G.703 data rates.**
- **Adaptive cable input equalisation.**
- **Data regeneration.**
- **Front panel monitoring facility.**
- **Protection switching facility.**
- **External alarms and bypass.**
- **Redundant pair operation capability.**
- **Compatible with other IRT Eurocard modules and frames.**

### General:

The DDA-3301 is a data distribution amplifier that operates in accordance with the G.703 specification<sup>1</sup>. The G.703 rate must be specified when ordering and may be 8, 34 or 45 Mb/s.

The DDA-3301 incorporates a protection facility for switching to signals from a standby module when a fault is detected.

Three 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.

An Alarm Indication Signal (AIS) detected in the data stream generates a changeover request for a companion unit.

Indicators are provided on the front panel for:

- DC power
- Data loss
- AIS detect
- 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-3301RH](#)) is available to link the signal and logic sections of two modules.

<sup>1</sup> 45 Mb/s version unshaped, scaled on G.703 specification fig. 17.

# DDA-3301 Technical Specifications

## Data:

Generally in accord with CCITT G.703 specifications.

## Input:

Type Transformer coupled.  
Impedance 75  $\Omega$  terminated.  
Equalisation Automatic for up to 400 m of Belden 8281 equivalent.

## Outputs:

Type Transformer coupled.  
Number 3 switched, regenerated, relocked outputs located on rear connection assembly and one located on front panel.  
Impedance 75  $\Omega$  source terminated.

## Electrical characteristics:

Data rate 8,448 Kb/s or 34,368 Kb/s or 44,736 Kb/s.  
Specify rate when ordering as DDA-3301/8, DDA-3301/34 or DDA-3301/45. Specified data rate indicated on front panel.  
Signal level 2.37 V (8Mb/s) or 1.0 V (34 & 45 Mb/s).  
Other See G.703 specification for selected data rate.  
Note: 45 Mb/s version unshaped output, scaled on G.703 specification figure 17.

## Controls & alarms:

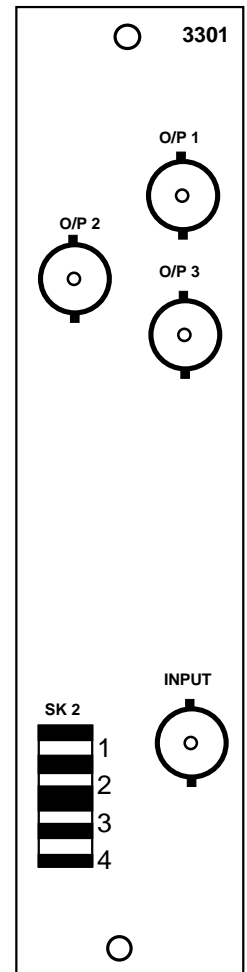
DC power.  
Data loss.  
"Blue Book" AIS detect.  
Module in service.  
Module in standby.  
Bypass.  
General alarm.  
Changeover request.

## Connectors:

Data: BNC.  
Alarm: Krone LSA plus.

## Other:

Power requirements 28 Vac CT (14-0-14) or  $\pm 16$  Vdc.  
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-3301 rear connector assembly.  
Optional accessories Instruction manual.  
[ZDA-3301RH](#) double rear assembly, for handshake connection of two DDA-3301's.



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

## Detailed specifications available from:

**Manufacturer:**  
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