IRT

I R T Electronics Pty Ltd A.B.N. 35 000 832 575
26 Hotham Parade, ARTARMON N.S.W. 2064 AUSTRALIA
National: Phone: (02) 9439 3744 Fax: (02) 9439 7439
International: +61 2 9439 3744 +61 2 9439 7439
Email: sales@irtelectronics.com
Web: www.irtelectronics.com

2.048 Mbps (E1) G.703
Data Distribution Amplifier
Type DDA-4280

Block diagram DDA-4280 - Signal path
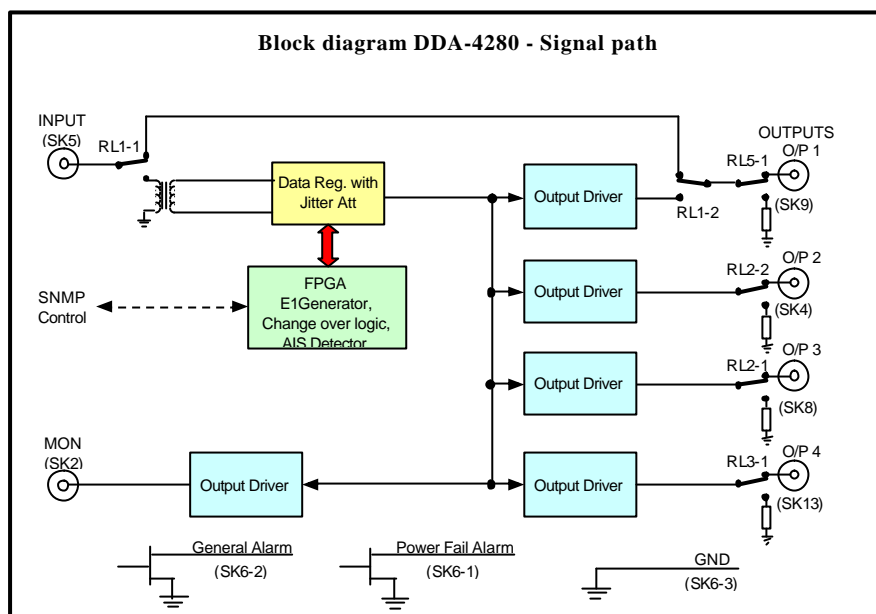
Features:

- **Data regeneration with Jitter Attenuator**
- **Front panel monitoring facility.**
- **Protection switching facility.**
- **External alarms and bypass.**
- **Redundant pair operation capability.**
- **Simple Network Management Protocol (SNMP) monitoring.**
- **Compatible with other IRT Eurocard modules and frames.**

General:

The DDA-4280 data distribution amplifier is intended for use with E1 data signals conforming to the ITU Rec. G.703. The DDA-4280 is primarily intended for use in pairs with a double width rear assembly for automatic path protection applications, although it is supplied as standard with its own rear assembly for stand-alone applications.

Four outputs are provided at the rear of the module with an additional output for monitoring purposes on the front panel. One output (O/P 1) is controlled by relays to provide a bypass signal from the input in the event of a power failure.

Indicators are provided on the front panel for:
- Data loss
- AIS detect
- Module in service (Main)
- Module in standby
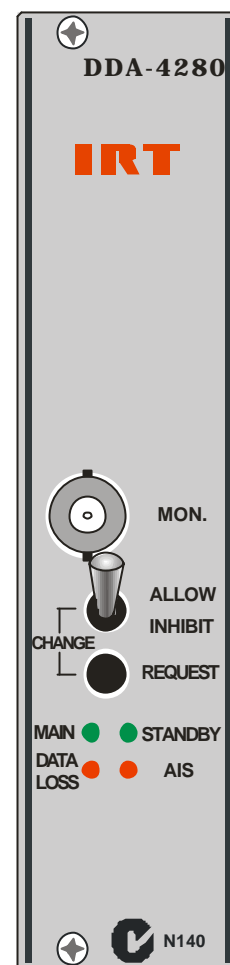
Changeover inhibit and changeover request switches are provided on the front panel for use where modules are linked in pairs for redundancy. For this configuration the double width rear assembly is needed to link the logic sections of two modules.

When used as a distribution amplifier the DDA may be housed in any of IRT's standard Eurocard frames. When used in pairs for handshake operation only 3 RU chassis types may be used so that the double width rear assembly may be used.

The DDA-4280 is also equipped with Simple Network Management Protocol (SNMP) monitoring so that status and alarms can be remotely monitored and controlled via an Ethernet connection. This function is only available when the unit is housed in an IRT 4000 series frame fitted with an SNMP agent module.

DDA-4280 Technical Specifications

In accord with ITU-T Rec. G.703 – see *Electrical characteristics of G.703 signals*.

Input:

Type	Transformer coupled.
Impedance	75 Ω terminated.

Outputs:

Number	1 switched, 3 non-switched, regenerated, reclocked shaped outputs located on rear connection assembly and 1 located on front panel.
Impedance	75 Ω source terminated.

Electrical Characteristics:

Cable Type	Coaxial
Other	See G.703 Specification for 2.048Mb/s data rate

Controls & alarms:

Input:

External changeover request	A ground applied to this input will emulate the operation of the front panel switch "Change Request".

Outputs:

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Power Failure	Contact to open circuit if power has failed.
General alarm	Contact to open circuit if Data Loss is detected OR AIS is detected

Connectors:

	Data:	BNC
	Alarm:	Krone LSA plus

Indicators:

Data loss.
AIS detect.
Module in service (Main).
Module in standby.

Power requirements	28 Vac CT (14-0-14) or ± 16 Vdc.
Power consumption	< 4 VA
Temperature range	0 - 50° C ambient
Mechanical	Suitable for mounting in IRT 19" rack chassis types with input output and power connections on the rear panel.
Finish: Front panel:	Grey background, 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
Standard accessories	Rear connector assembly.
Optional accessories	Double width rear assembly.
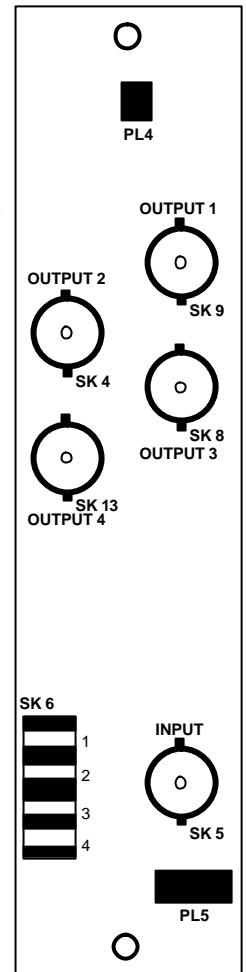
Due to our policy of continuing development, these specifications are subject to change without notice.