

## Digital Data Switcher Type DDS-3031

#### **Features:**

- 5 x 1 RS422 / RS485 bi-directional data switch.
- May be cascaded to 20 x 1.
- Local or remote control options.
- Universal wire per crosspoint or binary coded remote control.
- Compatible with other 3000 series analogue & digital switchers.
- May be mounted in same frame as other IRT Eurocards including VDA's, ADA's, detectors and processors.



### General:

The DDS-3031 RS422 / RS485 bi-directional data switcher is part of a family of "smart" switchers in Eurocard format which may be linked and configured by the user to cover a wide range of switching and monitoring functions.

On board links allow several switchers to be joined for  $10 \times 1$ ,  $15 \times 1$  or  $20 \times 1$  operation.

The switcher may be slaved to operate in conjunction with similar switchers for analogue video, stereo audio and serial digital video.

This makes the DDS-3031 ideally suited to situations such as editing suites where control signals need to be switched either individually or in conjunction with video and audio source selection. Only the selected bidirectional path is active at any time with unselected data outputs reverting to tri-state. This allows switchers to be used in multiple combinations (subject to logical conflicts).

The CPS-3050 local control switch panel kit converts the switcher for stand alone operation.

The CPS-9001 remote control panel provides a 5 button control with on board addressing to allow formation of 10 x 1, 15 x 1 or 20 x 1 combinations. The switches have tally LED's and label inserts. Multiple panels may be used with tally to each panel.

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**IRT Electronics Pty Ltd** 

Manufacturer:

# **DDS-3031** Technical Specifications

Data inputs	s:			
Number		6. (One selected input active - other 5 'don't care'.)	$\bigcirc$	
Туре		RS422 / RS485.	3031	
Impedance		>10 k $\Omega$ . Terminated with optional 330 $\Omega$ resistor.		
Threshold level		200 mV differential for a common mode of -7 to $+12$ V.	TL1 R1 R2 TL2	
Data outputs:				
Туре		RS422 / RS485.	$\bullet$ + $\overset{R}{}$ + $\bullet$	
Number		6. (One selected output active - other 5 tri-state.)		
Level		5 V unloaded (differential).	● + ' ' + ●	
		$>2$ V (50 $\Omega$ load) (differential).	Gnd Gnd	
<b>Control inputs/outputs:</b>			TL3R3 R4TL4	
Туре		5 bit BCD coded parallel TTL level.		
		or		
		individual grounding contacts.		
Number		1 input & 1 output.		
			Gnd Gnd	
Performance:			TL 5 R 5 R O/P TL-O/P	
Switching		Within 20 ms. Timing may be synchronised to another		
		switcher.		
Maximum data rate		>2 Mb/s.		
Dower requirements		28 $V_{00}$ CT (14.0, 14) or $\pm$ 16 Vda		
Power consumption		$28$ vac C1 (14-0-14) or $\pm$ 16 vac.	● Gnd Gnd ●	
r ower consum	puon	<240 mA.		
Connectors	: Data	Plug in 5 pin screw terminal block.		
	Control	Plug in 10 pin dual IDC.	PL5 OUT PL4 IN	
Other:				
Temperature range		$0 - 50^{\circ} \text{ C}$ ambient		
Mechanical		Suitable for mounting in IRT 19" rack chassis with input,		
		output and power connections on the rear panel.		
Finish: F	Front panel	Grey enamel, silk-screened black lettering & red IRT logo		
]	Rear assembly	Detachable silk-screened PCB with direct mount connect	ctors to Eurocard and	
		external signals	external signals	
Dimensions		6 HP x 3 U x 220 mm IRT Eurocard		
Supplied accessories		Rear connector assembly including matching connectors for inputs & outputs.		
Optional accessories		CPS-3050 local control conversion with 5 pushbuttons & tally LED's.		
		CPS-9001 remote control panel with 5 pushbuttons & tally LED's.		
		TME-6 module extender card		
			, , <b>.</b>	

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

Detailed specifications available from: Local Agent: IRT

IRT can be found on the Internet at: http://www.irtelectronics.com