

## BNC Coaxial Switches for IF Applications (cont.)

### Selection Guide

Control Voltage is specified by a single digit:

0	5V d.c. common positive
1	12V d.c common positive
2	24V d.c common positive

## IF Amplifier Blocks

- 50-300MHz
- 50Ω and 75Ω options
- 24V d.c. power
- Fault monitoring
- Various gain options
- BNC Connectors



DrawCom can offer a range of IF amplifier blocks in both 50Ω and 75Ω configurations, with a variety of gain options. Each amplifier includes fault monitoring (based on power supply current), with two relay contact outputs.

The amplifiers can be supplied ready built into a rack-mount unit, including power supplies, optional redundancy controller and optional input or output splitter/combiner.

These configurations are described in the DDA226 data sheet.

The amplifiers require a nominal 24V d.c. power supply with a wide tolerance range, and are fitted in screened aluminium cases.

Mounting uses the BNC connector fixings.

The power and fault output connector may be mounted either on the same face as the BNC connectors, or on the opposite face. This is an order option.

### Selection Guide

DDS0303-cg	75Ω amplifier block
DDS0304-cg	50Ω amplifier block

c - power/alarm connector position:

- 0 - same face as BNC connectors
- 1 - opposite face to BNC connectors

g - amplifier gain as per specification table

*Note: The DDS0303 replaces the DDS0113, and the DDS0304 replaces the DDS0115. Connector positions are different; other specifications are unchanged.*

## IF Amplifier Blocks (cont.)

Specification			
<b>Configuration</b>		DDS0304-XX	DDS0303-XX
<b>Impedance</b>		50	75
<b>Connectors</b>		BNC	BNC
<b>Supply Voltage</b>		20 – 28V d.c. 100mA max	
<b>Gain options (minimum) Typical gain 2dB higher</b>	-X1	+12.0dB	+10.0dB
	-X2	+14.0dB	+12.0dB
	-X3	+16.0dB	+14.0dB
	-X4	+18.0dB	+16.0dB
	-X5		
<b>Output power (1dB compression)</b>	-X4	+8dBm	+6dBm
	others	+10dBm	+8dBm
<b>Max input power (no damage)</b>		+10dBm	+10dBm
<b>Input Return Loss (typical for –X1)</b>	0-200MHz	>13dB	>20dB
	0-300MHz	>10dB	>15dB
<b>Size (excluding connectors)</b>	mm	92 (W) X 86 (D) X 27.5 (H)	
<b>Fixings</b>		By nuts on BNC connectors	
<b>Control Connector</b>		9-way D-plug	9-way D-plug
<b>Fault output</b>		2 x Form C relay contact rated 30V d.c. 0.1A – indicate amplifier power supply current outside limits	

## Waveguide Switch Buffers

- Control of non-standard Waveguide Switch
- Interface to “common positive” coils
- Isolation of supplies
- Support for different supply voltages
- Compatible with DDA70 and other controllers
- Booster/isolator for low power drive circuits

The DDS0506 and DDS0509 provide a simple interface between the DDA70 (and similar waveguide switch controllers) and waveguide switches which require a drive with a common positive. They also allow use of alternative drive voltages and power supplies.

Each buffer comprises a strip of circuit board carrying five identical circuits. This can be plugged directly onto the outputs of a DDA70 to convert the interface, or wired appropriately. The strip may be cut into individual buffers if required.