

BNC Coaxial Switches for IF Applications

- Wide range of configurations
- d.c. to 200MHz
- 50Ω and 75Ω options
- Low loss - mechanical switches
- Latching relays
- Retain state with no power
- 5V, 12V or 24V d.c. control
- Position tellbacks
- BNC Connectors



DrawCom can offer a wide range of coaxial switches for IF applications. Most are based on single or multiple transfer switch configurations, although other configurations can be provided on request.

All switches use latching mechanical relays, minimising steady state power requirements and ensuring that the path is maintained in the absence of power. A range of control voltages is available, and all switches provide tellback contacts. All switches are fitted in screened aluminium cases.

The simplest configuration implements a single transfer switch. Other options include a 1 of 4 selector switch and a 1+4 standby chain. These multiple stage switches give enhanced performance, by eliminating inter-switch cables and connectors, as well as reduced cost, when compared with systems using individual transfer switches.

Specification

Part Number	DDS9732-v15	DDS9732-v17	DDS0019-v15	DDS9823-v17		
Configuration	Transfer	Transfer	1+4	1+4	1 of 4	1 of 4
Impedance	50	75	50	75	50	75
Connectors	BNC	BNC	BNC	BNC	BNC	BNC
Control Voltage (v)	5,12,24	5,12,24	5,12,24	5,12,24	5,12,24	5,12,24
Main path loss -Typ	0.1dB	0.1dB	0.2dB	0.3dB		
0-100MHz Max	0.3dB	0.3dB	0.4dB	0.7dB		
Main path loss -Typ	0.2dB	0.3dB	0.2dB	0.4dB		
0-200MHz Max	0.4dB	0.6dB	0.6dB	0.9dB		
Return Loss Typ	-23dB	-20dB	-22dB	-20dB*		
0-100MHz Max	-23dB	-16dB	-19dB			
Return Loss Typ	-21dB	-14dB	-17dB	-18dB*		
0-200MHz Max	-17dB	-11dB	-15dB			
Size (excluding connectors)	110 x 86.5 x 28.0mm		192 x 90 x 25.5mm			
Fixings (control connector is on opposite face to coaxial connectors)	2 x M3 hole on coax connector face - 95.6mm FC		Via BNC nuts on coax connector face (19mm centres) or 2 x M4 bush on control connector face 171.9mm FC			
Control Connector	9-way D-plug	9-way D-plug	20-way IDC	20-way IDC	20-way IDC	20-way IDC

* Standby through path return loss typically 4dB less than figures stated.
v = Control Voltage

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.