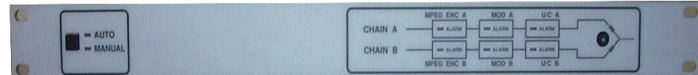


DOUBLE D ELECTRONICS LTD

DDA224-XXX Low Cost 1+1 Switch Controller & Redundancy Controller

- * Ideal for mobile applications
- * Up to two coaxial or waveguide switches
- * Protects two sets of equipment
- * Up to three items of equipment per chain
- * Automatic redundancy mode
- * Custom front panel options
- * Single universal mains supply
- * Optional RS-232 or RS-422/485 serial ports
- * 1U 19" rack mount
- * Optional Summary alarm output



The DDA224 is a general purpose controller for 1+1 switching systems using coaxial or waveguide switches, and includes automatic redundancy facilities. Its compact size makes it ideal for mobile use, and other applications where space is at a premium.

A wide range of switch types are supported, including IF coaxial (50Ω or 75Ω), SHF coaxial and waveguide. Input and output switches may be different types, giving support for a wide range of equipment including HPAs, up and down converters, LNAs, LNBs and modems.

There is a separate connector for alarms from each protected equipment chain, with support for up to three fault signals from each chain. There is a mute output available for each chain, which is active during switching (it can be ignored if none required).

For applications requiring remote monitoring and control a serial link can be provided as an optional module. It can support both 4-wire RS-485 and RS-232, and is compatible with the command set of the larger DDA70 family.

The front panel provides local control and status. A number of standard front panel mimics can be supplied, including a generic layout and some showing typical redundancy configurations. Alternatively custom mimics can be provided, based on the standard indicator and switch positions.

SPECIFICATION

Physical: 19" rack, 1U high, 260mm deep (excluding connectors).

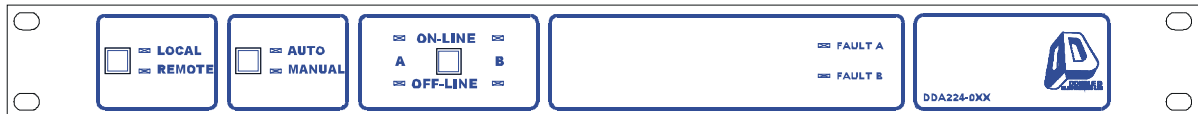
Power: 90-254V a.c., 48-62Hz, 80VA max. Single power feed via IEC mains inlet

Switches: Support for up to two switches:
Option 0 - No switch
Option 1 - External coaxial or waveguide, 24V coils, common negative, including inputs for lock. Coil drive up to 2.5A.
Option 2 - External coaxial, 24V coils, common positive. Coil drive up to 300mA.
Option 3 - Internal latching coaxial transfer switch, 50Ω, to 18GHz. SMA connectors.
Option 5 - Internal latching coaxial transfer switch, 50Ω, to 200MHz. BNC connectors
Option 7 - Internal latching coaxial transfer switch, 75Ω, to 200MHz. BNC connectors

Chain Alarms: 9-pin D-socket; three alarm signals per chain accept volt-free contact or NPN open collector.
Mute output Form C relay contact 30V d.c. 0.1A on alarm connector

Host Serial: 9-pin D-socket; RS-232 and 4-wire RS-422/RS-485, fixed 9600,7,e,1. Supports "Printable ASCII" and "STX/ETX" protocols. (Optional module)

Summary Alarm: 9-pin D-plug; volt-free relay contact signals alarm on any detected fault.



Ordering Information

DDA224-MIOS 1+1 Redundancy and Switching Controller.

In the above part number, substitute as follows:

- M Mimic type: 0 = as above
- I, O Input and output switch types - option number as per the 'Switches' section of the specification.
- S 0 = No serial interface
1 = RS-232 serial interface
2 = RS-422/485 serial interface