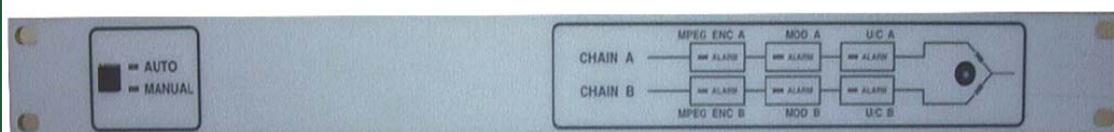


## Low Cost I+I Switch Controller & Redundancy Controller

- 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
- Ideal for mobile applications



The DDA224 is a general purpose controller for I+I 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,

### Selection Guide

<b>DDA224-MIOS</b>	1+1 Redundancy and Switching Controller.
In the above part number, substitute as follows:	
<b>M</b>	Mimic type: 0 = as above
<b>I, O</b>	Input and output switch types - option number as per the 'Switches' section of the specification.
<b>S</b>	0 = No serial interface 1 = RS-232 serial interface 2 = RS-422/485 serial interface

## Low Cost I+I Switch Controller & Redundancy Controller (cont.)

Specification	
<b>Physical</b>	19" rack, 1U high, 260mm deep (excluding connectors).
<b>Power</b>	90-254V a.c., 48-62Hz, 80VA max. Single power feed via IEC mains inlet
<b>Switch</b>	Support for up to two switches: <b>Option 0</b> - No switch <b>Option 1</b> - External coaxial or waveguide, 24V coils, common negative, including inputs for lock. Coil drive up to 2.5A. <b>Option 2</b> - External coaxial, 24V coils, common positive. Coil drive up to 300mA. <b>Option 3</b> - Internal latching coaxial transfer switch, 50Ω, to 18GHz. SMA connectors. <b>Option 5</b> - Internal latching coaxial transfer switch, 50Ω, to 200MHz. BNC connectors <b>Option 7</b> - Internal latching coaxial transfer switch, 75Ω, to 200MHz. BNC connectors
<b>Chain Alarms</b>	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
<b>Host Serial</b>	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)
<b>Summary Alarm</b>	9-pin D-plug; volt-free relay contact signals alarm on any detected fault.

## Converter/Monitor

- Interface to RS-232 data analysers
- Temporary RS-422/485 serial for PC
- Supports popular Satcoms pinout
- Two independent channels
- PC-compatible RS-232 interface
- Tx/Rx monitor capability on one channel
- Transmitter tri-state capability
- Receiver termination option



The DDA225 provides versatile RS-232 to RS-422/485 conversion facilities, and is designed to interface between a PC or RS-232 data analyser and the 4-wire RS-422/485 serial interfaces commonly found in Earth Stations.

Channel I is full featured, with the option to be used as a dual-signal monitor or as a transmit/receive data interface converter. In monitor mode the unit monitors both transmit and receive lines (at RS-422/485 levels), and converts to RS-232. In transmit/receive mode the unit effectively converts a PC RS-232 serial port into a 4-wire RS-422/485 port. The transmitter may optionally be controlled by the RTS signal to give support for multidrop configurations.