

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

## Converter/Monitor (cont.)

The RS-232 connectors may be connected directly to a PC using a 1:1 cable.

The RS-422/485 connectors implement the popular SA-Bus pinout, which is to be found on most equipment manufactured by Double D Electronics Ltd, as well as the equipment of many other manufacturers.

Channel 1 has a loop-in connection for the RS-422/485, and implements a simple patch panel, allowing support for other connector pinouts.

Channel 2 implements the interface conversion facilities as a subset of channel 1's capabilities.

The unit is powered from a plug top power supply.

Selection Guide	
<b>DDA225-01</b>	RS-232 to RS-422/485 Converter/Monitor, including plug top power supply for UK mains, jumper leads for patch panel and manual

## Modular IF Amplifier Subsystem

- 50-300MHz
- Various gain options
- Up to 9 amplifiers in 3U rack
- 1+8 redundant system in 6U rack
- Amplifier fault detection
- 50Ω and 75Ω versions
- Optional splitter for DA applications
- Individually replaceable amplifier modules
- Redundant Power Supplies
- Summary alarm output

The DDA226-XX provides up to nine IF amplifier channels, covering the frequency band used for IF in satcom and other applications. Each amplifier is contained in a separate module, allowing one channel to be replaced without affecting the rest of the unit.

In the simplest configuration the unit provides a number of independent amplifiers, with individual BNC connections for input and output. An optional internal splitter turns the unit into a distribution amplifier, accepting a single input and generating up to eight individually buffered outputs.

A further option adds redundancy switching capabilities similar to those provided by the DDA89, giving a 1+8 amplifier subsystem in a 6U rack. Each amplifier module incorporates power supply current monitoring to detect most faults.