# DOUBLE D ELECTRONICS LTD

## DDA257-XXXE General Purpose 1+2 Switch Controller & Redundancy Controller

* Up to four coaxial or waveguide switches in 1+2 configuration
* Automatic redundancy mode protects two chains
* LNB Power supply option
* Generic front panel
* 10/100BaseT Network port for RC&M, configuration
* Muting control when used with HPAs
* Redundant Power Supplies
*RS-232 and RS-422/485 serial port for RC&M
*1U 19" rack mount
*Summary alarm output



The DDA257 is a general purpose controller for 1+2 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. The configuration is ideal for small dual-polarisation up- and down-links, with a single standby available to two paths.

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.

The unit supports two fault signals from each chain (typically alarm and fault) and there is a volt-free contact output for HPA muting during switching. Buffered alarm outputs are also provided for the main alarm.

HPA muting is generated within the controller; the affected HPAs are muted during switching, and if a switch is moved manually or becomes disconnected.

The DDA257 includes a 10/100BaseT network port which supports a TCP/IP 'sockets' interface for remote monitoring and control, as well as being used for configuration. A serial port supporting 4-wire RS-485 and RS-232 also provides RC&M facilities. The control protocol is compatible with the larger DDA286/DDA267 family as well as most of our other controllers (such as DDA219, DDA282.

The front panel provides local control and status, and the standard layout is shown above. Other arrangements, colour schemes etc may be available on request.

# SPECIFICATION

Physical:            19" rack, 1U high, 450mm deep (excluding connectors).

Power:               90-254V a.c., 48-62Hz, 150VA max. Redundant power feed (dual power supplies) via two IEC mains inlets

Switching:           Support for up to four mechanical switches:
                     **Option 1** - External coaxial or waveguide, 24V coils, common negative, including inputs for locks.
                     **Option 2** - External coaxial switch, 24V coils, common positive.
                     **Option 3** - Internal latching coaxial transfer switch, 50Ω, to 18GHz.
                     **Option 5** - Internal latching coaxial transfer switch, 50Ω, to 200MHz
                     **Option 7** - Internal latching coaxial transfer switch, 75Ω, to 200MHz
                     **Option 9** – Triple current monitored LNA/B power supply

Chain Alarms:        three 9-pin D-sockets; each with two inputs for volt-free contact or NPN open collector, and volt-free changeover contact for muting.

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.

Summary Alarm:       two form C relay contacts signal alarm on any detected fault.

Network:             A 10/100BaseT network port, with TCP/IP sockets interface for RC&M, web browser interface for configuration and SNMP (V1 and V2c)

## Ordering Information
DDA257-MIO          1+2 Redundancy and Switching Controller.

In the above part number, substitute as follows:

M                    Mimic type:
                     0 - Standard generic mimic (see drawing on previous page)

I, O                 Input and output switch types - option number as per the 'Switches' section of the specification (zero if not required)

Example:             DDA257-051 has a generic mimic, 50Ω IF input switches and outputs to drive two external coaxial or waveguide switches.