DOUBLE D ELECTRONICS LTD
DDA219-XXX General Purpose 1+1 Switch Controller \& Redundancy Controller

* Up to two coaxial or waveguide switches
* LNB Power supply option
* RS-422 switching option
* Automatic redundancy mode protects two equipments
* Muting control when used with HPAs
* Redundant Power Supplies
* RS-232 and RS-422/485 serial ports for RC\&M
* Parallel control, network/SNMP options

* 1U 19" rack mount
* Summary alarm output


The DDA219 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 ( $50 \Omega$ or $75 \Omega$ ), 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.

An alternative switching interface provides electronic buffering and switching of RS-422 signals, including two separately buffered outputs.

There is a separate connector for alarms from each protected equipment chain; there is support for two fault signals from each chain (typically alarm and fault) and there is a voltfree contact for HPA muting during switching. Buffered alarm outputs are available in most configurations.

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

The DDA219 includes a remote monitoring \& control port supporting 4-wire RS-485 and RS-232, compatible with the larger DDA70 family as well as the DDA69/DDA78 1+1 controllers. A networked SNMP V1/V2c interface is available as an option.

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.

## SPECIFICATION

| Physical: | 19 " rack, 1 U high, 450 mm deep (excluding connectors). |
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| Power: | $90-254 \mathrm{~V}$ a.c., $48-62 \mathrm{~Hz}, 150 \mathrm{VA}$ max. Redundant power feed <br> (dual power supplies) via two IEC mains inlets |

Switching: Support for two mechanical switches:
Option 1 - External coaxial or waveguide, 24 V coils, common negative, including inputs for locks.
Option 2 - External coaxial switch, 24 V coils, common positive.
Option 3 - Internal latching coaxial transfer switch, 50』, to 18GHz.
Option 5 - Internal latching coaxial transfer switch, 50』, to 300 MHz
Option 7 - Internal latching coaxial transfer switch, $75 \Omega$, to 300MHz
or: $\quad$ Option 8 - RS-422 changeover option (electronic switching and buffering) - max one per unit.
Option 9 - dual monitored LNB power supplies. See separate data sheet.

Chain Alarms: 9-pin D-socket; two alarm signals per chain accept volt-free contact or NPN open collector.
Volt-free changeover contact for muting.
Host Serial: $\quad 9-$ 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: 9-pin D-plug; volt-free relay contact signals alarm on any detected fault.

Network: A 10/100BaseT network port, with web browser interface and optional SNMP (V1 and V2c) can be provided; further details on request.

Parallel Control: Parallel interface available as an option (replaces buffered alarms)

## Ordering Information

DDA219-MIO 1+1 Redundancy and Switching Controller.
In the above part number, substitute as follows:
M Mimic type:
0 - Standard generic mimic (upper drawing on previous page)
2 - Standard signal path mimic (lower drawing on previous page)
9 - Remote control unit - PSU indications only
I, O Input and output switch types - option number as per the 'Switches' section of the specification.

Example: DDA219-051 has a generic mimic, $50 \Omega \mathrm{IF}$ input switch and output to drive an external coaxial or waveguide switch.

