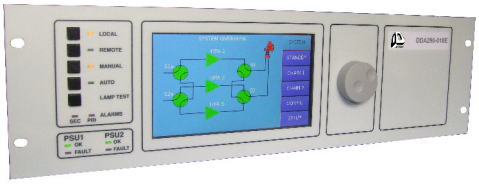
DOUBLE D ELECTRONICS LTD

DDA290 Switching Controller with GUI



* 1+1, 1+2 Redundancy controller
* Graphical user interface
* Waveguide Switch, Coaxial Switch Control
* LNA/LNB Power Supplies
* Data Circuit Switching
* 10/100BaseT Network port
* SNMP V1 and V2c
* TCP/IP 'Sockets' communication
* Web browser configuration and status
* Automatic Changeover logic
* Remote monitoring & Control

The DDA290 is a general purpose switching and redundancy controller (including LNA/LNB controllers) providing a graphical user interface. The controller can support up to 7 waveguide/coaxial switches and three HPAs, optionally configured in a 1+1 or 1+2 redundant configuration.

The main features are as follows:

Construction
19" rack mount, 3U high Coaxial switching systems may incorporate the switches (and possibly other RF components) within the unit.

Power Supplies
Universal input 90-240V a.c. 50-60Hz. Dual mains supplies.

Coaxial Switch Control
Most standard coaxial switches can be accommodated. IF transfer switches (d.c. to 300MHz) are available in 50Ω and 75Ω versions. Coaxial transfer and multi-way switches operating at up to 18GHz (or 26GHz) are also available.

Waveguide Switch Control
Control of industry standard 24-28V waveguide switches (48V as an option), using the same interface as the DDA219/DDA257/DDA286/DDA70/DDA86 families of controllers.

HPA Interface
DDA219/DDA286/DDA70/DDA86 compatible connections support up to three HPAs, each with two fault inputs and a mute output.

LNA/LNB Power
A variety of options to power LNAs and LNBs are available. For simple systems a fixed 24V d.c. output is often adequate. Options provide for variable output voltage. Switched voltage units are available for dual band systems. For units with dual mains feed and other than 24V output, the local power generation circuitry may also be made redundant.

Up to six outputs can be provided; each from a separate circuit for best reliability.

Each is on a separate rear panel connector, with its own self-resetting fuse. Where LNB power has to be fed via its coaxial output connector, a range of bias tees can be provided.

Each LNB power supply is individually monitored, and an alarm generated if the current drain goes outside preset limits.

It is also possible to mount the LNA/LNBs internally.

Control Facilities

Most control facilities can be implemented in software, typically including redundancy controllers, switching logic and general I/O interface.

The unit includes two serial ports, which may be used for various purposes. Both ports support RS-232, RS-422 and 4-wire RS-485 at a variety of baud rates. The industry standard 'Printable ASCII' and 'STX/ETX' protocols are supported. On the RC&M side, commands vary according to the facilities required, and are generally based on the DDA219/DDA286 Waveguide Switch Controller command set.

One serial port may be used to communicate with the HPAs, in which case selected HPA parameters may be displayed on the front panel. Dependent on HPA capabilities, these parameters may also be set.

Network Port

The unit includes a 10/100BaseT network port which supports multiple simultaneous connections. The web browser interface is used for a variety of purposes, including unit configuration and system log display, as well as displaying some key system status. The TCP/IP 'sockets' interface supports multiple simultaneous connections, and provides a very fast alternative to a serial connection for RC&M. The unit also supports SNMP V1 and V2c for RC&M.

Power Levelling

The controller can be configured to support power levelling, where the standby is updated with the settings of the main path equipment it is replacing during a switching sequence. (Subject to the command set of the HPAs).

Local Control

For most units a local front panel provides manual control of the switching, and various status indications.

Ordering Information

Please contact the factory to discuss the most appropriate configuration, after which a part number will be assigned.

Double D Electronics Ltd
Unit 6, Robins Wharf
Grove Road
Northfleet
Kent DA11 9AX

Tel: +44 (0) 1474 333456
Fax: +44 (0) 1474 333414
http://www.doubledelectronics.co.uk
sales@doubledelectronics.co.uk