



DOUBLE D ELECTRONICS LTD

DDA237-XXX RF Amplifiers including 1+1 Redundancy Controller

- * Two RF amplifiers - various gain options
- * Options on RF connectors
- * Integral 1+1 redundancy controller
- * Generic front panel
- * Remote Monitoring & Control Port
- * Redundant Power Supplies
- * Amplifier fault monitoring
- * RS-232 and RS-422/485 serial ports for RC&M
- * 1U 19" rack mount
- * Summary alarm output



The DDA237 is a rack mount amplifier with inbuilt redundancy switching. It is based on the DDA219 redundancy controller, offering compatible interfaces and the same serial protocol.

The DDA237 includes two RF amplifiers; their gain and performance, as well as the RF connectors used, depends on the option chosen. In most configurations each amplifier has its own regulated power supply, derived from the internal dual-fed power bus. Each amplifier is monitored for faults (power supply current); fault status for each amplifier is available on a relay contact.

A wide range of amplifiers can be incorporated into the unit; including IF coaxial (50Ω or 75Ω BNC), L-Band, wideband or SHF with SMA or N-type connectors.

Two integral transfer switches connect the internal amplifiers into a symmetrical 1+1 redundant configuration; both main and standby paths are available through the rear panel coaxial connectors.

Local control is available through the front panel; this also gives status.

The DDA237 includes a remote monitoring & control port supporting 4-wire RS-485 and RS-232. It uses the same protocol and command set as the DDA219, which is compatible with the larger DDA70 family as well as the DDA69/DDA78 1+1 controllers.

SPECIFICATION

- Physical: 19" rack, 1U high, 360mm deep (excluding connectors).
- Power: 90-254V a.c., 48-62Hz, 150VA max (when switching). Redundant power feed (dual power supplies) via two IEC mains inlets
- 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: 9-pin D-plug; volt-free relay contact signals alarm on any detected fault.
- RF Switching: As appropriate to amplifier frequency range
- RF Amplifiers: See options below
- RF connectors: See list below

| DDA237 ORDERING OPTIONS | | | | | |
|--------------------------------|-----------|------------|-------------------|--|--|
| | -02 | -03 | -04 | | |
| Frequency Range | 20-250MHz | 10-2000MHz | 950-2150 MHz | | |
| Impedance | 50Ω | 50Ω | 50Ω | | |
| RF Connectors | BNC | N-type | N-type | | |
| Amplifier gain - min | 20dB | 30dB | 22dB | | |
| Amplifier gain - typ | | 33.5dB | 25dB | | |
| Amplifier +1dB compression | +25dBm | +15dBm | +17.5dBm** (min) | | |
| Amplifier noise figure (typ) | 4.5dB | 4.0dB | 1.5dB (2.2dB max) | | |
| | | | | | |

** DDA237-04 +1dB compression point is +22dBm min over 1500-2000MHz.

Other configurations available; please enquire