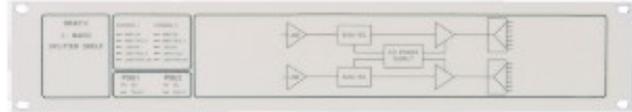




DOUBLE D ELECTRONICS LTD

DDA212 Dual LNB Power Supply and Splitter

- * Powers two LNA/LNB via signal cable
- * 8-way splitter on each channel
- * 950-2250MHz operation
- * Unity gain RF path
- * Comprehensive failure monitoring
- * Remote Monitoring & Control Port
- * System Diagram on Front
- * Redundant Power Feeds
- * 2U 19" rack mount
- * Simple setup - no presets
- * Summary alarm output



The DDA212 provides power and signal distribution facilities for satellite receive subsystems in earth stations. Comprehensive current and voltage monitoring facilities, under the control of a microprocessor, give rapid detection and indication of faults. This information is available via an optional 4-wire RS-485 serial port - ideal for unmanned sites, since it gives better visibility of the situation rather than a simple 'pass/fail'.

Distributed power regulation is employed to minimise the effects of single point failures. Dual mains inputs and primary switch mode power supplies generate the internal power bus and provide the first line of redundancy. Each LNB feed and internal amplifier then has its own secondary linear power regulator for best regulation and noise performance.

All supply voltages and currents for both the LNBS and the internal amplifiers are monitored using a microprocessor to filter and process the readings, and simplify setup. Parameters monitored include LNB voltage and current, internal amplifier voltage and current, and primary power supply voltages. These are then filtered and averaged before comparing against limits.

All nominal values for a channel are set up by a single press of a rear panel pushbutton. A range of tolerances may be set for the LNB current, using an internal DIP switch. The unit may also be configured via the RC&M port - ideal for unmanned sites.

The RF path covers the full extended L-Band of 950-2150MHz, and uses robust N-type connectors for all external connections (with an option for BNC connections on the RF outputs). Terminators are supplied for the RF outputs.

SPECIFICATION

- Physical: 19" rack, 2U high, 260mm deep (excluding connectors).
- Power: 90-250V a.c., 80VA max. Redundant power feed (dual power supplies)
- LNB Power: +18V d.c., 500mA maximum (may be disabled)
- RF Gain: 0dB nominal, ± 3 dB
- RF level: Max -15dBm input
- RF impedance: 50 ohms
- RF connectors: N-type (optional adaptors to BNC on outputs)
- Host Serial: 4-wire RS-422/RS-485, fixed 9600,7,e,1. Supports "Printable ASCII" and "STX/ETX" protocols.
- Alarm Output: Volt-free relay contact signals alarm on any monitored voltage or current out of tolerance.

Ordering Information

The following units have a d.c. path between RF outputs:

- DDA212-01 LNB Splitter/Power supply without RC&M interface, N-type output connectors, including terminators
- DDA212-02 LNB Splitter/Power supply including RC&M interface, N-type output connectors, terminators
- DDA212-11 LNB Splitter/Power supply without RC&M interface, BNC output connectors, including terminators
- DDA212-12 LNB Splitter/Power supply including RC&M interface, BNC output connectors, terminators

The following units have 30V blocking capacitors on each RF output:

- DDA212-21 LNB Splitter/Power supply without RC&M interface, N-type output connectors, including terminators
- DDA212-22 LNB Splitter/Power supply including RC&M interface, N-type output connectors, terminators
- DDA212-31 LNB Splitter/Power supply without RC&M interface, BNC output connectors, including terminators
- DDA212-32 LNB Splitter/Power supply including RC&M interface, BNC output connectors, terminators