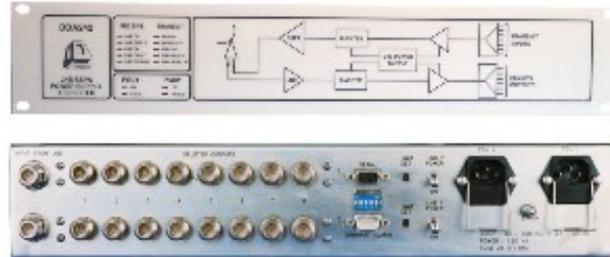




DOUBLE D ELECTRONICS LTD

DDA242-81 LNB/BUC Power Supply and Splitter

- * Powers one LNB via signal cable
- * Powers one BUC via signal cable
- * 8-way splitter on LNB output
- * 8-way combiner on transmit input
- * Simple setup - no presets
- * 950-2150MHz operation
- * System Diagram on Front
- * Dual mains feed
- * Unity gain transmit & receive paths
- * 10MHz path on transmit
- * Comprehensive failure monitoring
- * 2U 19" rack mount
- * Summary alarm output



The DDA242-81 provides power and signal distribution facilities for single thread satellite transmit/receive subsystems in earth stations. (It is similar in concept to other units in the DDA242 series; the main differences being a smaller case, lower power output on the transmit path, and dual mains feeds).

On the transmit side the unit accepts up to eight signals which are combined into a single output. An adjustable supply of +18V d.c. at up to 0.5A is then added on to this output through a bias tee.

On the receive side the unit generates a regulated supply, typically at 18V d.c., to power the LNB.

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 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 receive outputs). The transmit path also passes 10MHz through one of the inputs. (This is intended for BUCs which require a 10MHz reference). Terminators are supplied for the receive outputs and the transmit inputs. Both transmit and receive paths have a nominal unity gain.

A version with an RC&M port can be supplied to special order.

SPECIFICATION

Physical: 19" rack, 2U high, 260mm deep (excluding connectors).

Power: 90-250V a.c., 100VA max. (via IEC inlets)

LNB Power: +18V d.c., 500mA maximum (may be disabled by rear panel switch)

BUC Power: +18V d.c. 500mA maximum (may be disabled by rear panel switch)

Rx RF Gain: 0dB nominal, ± 3 dB

Rx RF level: Max -15dBm input

Tx RF Gain: 0dB nominal, ± 3 dB

Tx RF level: Max 0dBm input

RF connectors: N-type (50 Ω)

Host Serial: 4-wire RS-422/RS-485, fixed 9600,7,e,1. Supports "Printable ASCII" and "STX/ETX" protocols. (Special option)

Alarm Output: Volt-free relay contact signals alarm on any monitored voltage or current out of tolerance.

Ordering Information

DDA242-81 LNB/BUC Power Supply with monitoring