

IF Signal Level Monitor

- 8 channels of 50-200MHz monitoring
- -60 to 0dBm input range
- Level or window alarm thresholds
- Alarm relay contact for each channel
- 50Ω and 75Ω options
- Group alarm outputs
- Serial and network ports
- 1U 19" rack mount
- Configuration via RC&M and network ports
- Redundant power supplies
- Summary alarm output



The DDA241 can be used for monitoring the level of up to eight IF (50-200MHz) signals, with direct level monitoring capability as well as the ability to generate levelbased alarms.

Signal levels (in dBm) are available through the RC&M port. There is an option to adjust the measured value by a constant offset, so that any splitter and cable losses can be taken into account.

Each channel also has alarm threshold detection; high and low thresholds and debounce time are fully configurable.

In addition to the individual alarm channels there are four alarm groups, to each of which any combination of inputs may be assigned. A group alarm is signalled if any of the assigned inputs is in alarm. This facility allows simple sharing of this unit among several subsystems, with an alarm output for each subsystem.

The unit may be configured either via the RC&M port, or through a standard 10/100baseT network port. The network interface supports both Telnet and a standard web browser. All configuration data is retained in non-volatile memory, and thus if RC&M is not required the unit may be configured from a laptop or similar. Each of the eight inputs may be configured as a simple level alarm, or a window-based alarm.

The unit includes a front panel display showing the alarm status of each input and group, and the power supply status.

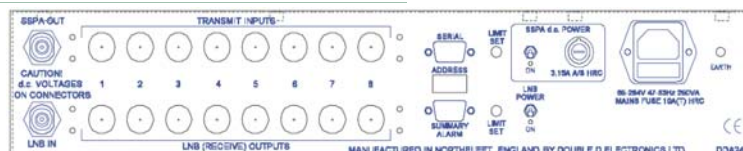
Selection Guide

DDA241-25	8-channel unit, 50Ω input impedance, dual power supply
DDA241-27	8-channel unit, 75Ω input impedance, dual power supply

IF Signal Level Monitor (cont.)

Specification	
Physical	19" rack, 1U high, 260mm deep (excluding connectors).
Power	90-250V a.c., 50VA max. Redundant power feed (dual power supplies)
Front Serial	Polycarbonate laminate showing alarm status for each channel and group, summary alarm, power supply status.
IF Input	Eight inputs 50Ω or 75Ω BNC 50-200MHz (useable 10-250MHz). Measurable input range -60dBm to +0dBm. Typical absolute measurement accuracy ±1.0dBm Typical relative accuracy ±0.3dBm
Host Serial	4-wire RS-422/RS-485, fixed 9600,7,e,1. Supports "Printable ASCII" and "STX/ETX" protocols for configuration and remote access.
Network	10/100BaseT RJ-45. Used for configuration via Telnet or web browser
Channel Alarm	Configurable for each individual channel. Either: a) Simple level alarm if above or below threshold or b) Window-based alarm if inside or outside level band Alarm output per channel - volt-free relay contact rated 30V d.c. 0.1A Programmable debounce time for alarm - 0 - 255 seconds in 1 second increments.
Group Alarm	Four groups Any combination of inputs may be assigned to each group. Alarm output per group - volt-free relay contact rated 30V d.c. 0.1A
Summary Alarm	Volt-free changeover relay contact rated 30V d.c. 0.1A.

LNB/SSPA Power Supply and Splitter



- Powers one LNB via signal cable
- Powers one SSPA 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
- Unity gain RF paths
- Option for d.c. path on transmit
- Comprehensive failure monitoring
- Optional Remote Monitoring & Control Port
- 2U 19" rack mount
- Summary alarm output

The DDA242 provides power and signal distribution facilities for single thread satellite transmit/receive subsystems in earth stations.

On the transmit side the unit accepts up to eight signals which are combined into a single output. A fixed supply of +48V d.c. (Or, optionally, +24V d.c.) at up to 3A is then added on to this output through a bias tee.

On the receive side the DDA242 generates a regulated supply, typically at 18V d.c., to power the LNB.