

DOUBLE D ELECTRONICS LTD

DDA258-XX Input/Output Unit with LNB power supplies and Analog Inputs

- * Chassis mount box
- * Dual power supplies
- * LNB Power supplies with monitoring
- * 16 digital input
- * 8 output relays
- * 10 analog inputs
- * Mountable in 3U rack
- * Summary alarm output



The DDA258 is a general purpose I/O unit for satellite ground station applications. It has been designed to transmit all heat to the outer casing, to simplify mounting in applications where air flow is limited.

The unit incorporates two LNB power supplies, including current and voltage monitoring. There are a further 10 analog inputs, intended for monitoring fibre optic units or other equipment producing an appropriately scaled analog voltage.

Sixteen digital inputs accept volt-free contacts.

Eight relay outputs provide Form C (changeover) contacts.

The DDA258 includes a remote monitoring & control port supporting 4-wire RS-485, with a protocol based on that used on the DDA70, DDA241 and DDA86.

Although intended primarily for chassis mounting, the unit also includes rails allowing it to fit into a standard 3U high 19" rack.

SPECIFICATION

Physical: Extruded case, 111mm (width) x 83mm (height) x 220mm (depth) excluding connectors.

Power: 90-254V a.c., 48-62Hz, 80VA max.
Redundant power feed (dual power supplies) via single IEC mains inlets

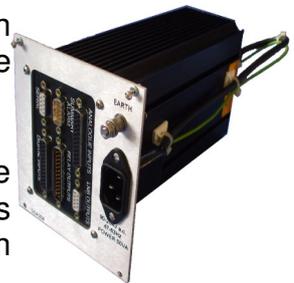
LNB Supply: Two LNB power supply outputs on a 9-way D-type socket. Maximum current 500mA per output. Factory set to 18V d.c. (Other voltages on request). Thermal and overcurrent protection. Output voltage and current available through the serial port.



- Digital Alarms: Sixteen inputs intended for volt-free contact or NPN open collector -normally closed, open for alarm. Open circuit voltage +5V d.c., wetting current 0.5mA max. 25-way D-type socket.
- Relay Outputs: Eight Form C relay contacts, rated 30V d.c. 0.5A, on 25-way D-type plug.
- Analog Inputs: Total 10 inputs, on a 25-pin D-socket. All measured with 12-bit resolution.
- a) Eight general purpose inputs; nominal input range 0 to +10V d.c. Input impedance >50K Ω
 - b) Two inputs intended to take a +12V feed from a power supply. The actual voltage may be monitored vial the serial port. In addition, an alarm is signalled if the input voltage on either pin drops below 10 volts. Maximum input 20V d.c.
- 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: Two Form C relay contacts, each rated 30V d.c. 0.5A, on 9-pin D-type plug. Relay normally energised, turned off on any detected fault.
- Control Protocol: Generally modelled on DDA241 and similar units; allows reading of state of all digital and analog inputs, reading of internal status, and control of outputs.

Accessories: The DDA258 can be supplied fitted with a 3U high panel and extension mains lead to facilitate mounting in a card cage (see photo to right).

A 3U card cage to accept units can also be supplied; as standard this comes with guide rails for three DDA258, and blanking panels which assume at least two DDA258 will be fitted.



Ordering Information

- DDA258-01 Fully populated unit as described above.
- DDA258-FP 3U panel and mains extension accessory for rack mounting
- DDA258-RCK 3U 19" rack with blanking panels, for 1-3 DDA258 (each DDA258 requires a DDA258-FP)