

## TWTA RC&M INTERFACE - CIM (cont.)

| Specification                     |   |
|-----------------------------------|---|
| <b>Physical:</b>                  | 1U 19" Rack mount, 250mm deep   |
| <b>Power:</b>                     | 90-250V a.c. 48-62Hz. 20VA max.   |
| <b>Host Serial:</b>               | Selectable RS-232 or 4-wire RS-422/RS-485<br>9600 or 19200 baud. 8,n 7,e 7,o data/parity<br>Supports "Printable ASCII" and "STX/ETX" protocols.               |
| <b>Connectors:</b>                | Power - IEC mains inlet<br>Serial - 9-pin D-socket<br>Summary Alarm - 9-pin D-plug<br>TWTA Analog - 9-pin D-socket<br>TWTA Status & Control - 50-pin D-socket |
| <b>RC&amp;M:</b>                  | Supports status polls and commands for TWTA interface as CPI CIM.<br>Also supports CPI Compact compatible command set. (Selectable)                           |
| <b>Summary Alarm:</b>             | DPDT relay output - 2 sets Form C contacts rated 30V d.c. 0.25A.<br>De-energised on fault.<br>Configurable to include/exclude faults from connected HPA       |
| <b>TWTA Analog:</b>               | Two analogue inputs 0-6V full scale representing 0..full power  |
| <b>TWTA Control &amp; Status:</b> | Inputs for volt-free contacts or NPN open collectors - status signals<br>Outputs NPN open collector or equivalent for control                                 |
| <b>Accessories:</b>               | Cables to connect to CPI TWTA can be supplied on request  |
| Selection Guide                   |   |
| <b>DDA236-01</b>                  | Single channel TWTA interface, including manual   |

## RF Amplifiers including I+I Redundancy Controller

- Two RF amplifiers - various gain options
- Options on RF connectors
- Integral I+I 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.

## RF Amplifiers including I+I Redundancy Controller (cont.)

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 I+I 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 I+I controllers.

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

### DDA237 ORDERING OPTIONS

|                                     | -02        | -03           | -04 |
|-------------------------------------|------------|---------------|-----|
| <b>Frequency Range</b>              | 20-250 MHz | 10 – 2000 MHz |     |
| <b>Impedance</b>                    | 50Ω        | 50Ω           |     |
| <b>RF Connectors</b>                | BNC        | N-type        |     |
| <b>Amplifier gain - min</b>         | 20dB       | 30dB          |     |
| <b>Amplifier gain - typ</b>         |            | 33.5dB        |     |
| <b>Amplifier + 1dB compression</b>  | +25dBm     | +15dBm        |     |
| <b>Amplifier noise figure (typ)</b> | 4.5dB      | 4.0dB         |     |