



# DOUBLE D ELECTRONICS LTD

## DDA78 CRCA Controller Family

- \* Supports units from Luso, Flann, Mitec, Comdev
- \* Supports phase combined and single HPA operation
- \* Meter(s) for power indication
- \* Muting control when used with HPAs
- \* Mains powered; 24-28V d.c. option
- \* RS-422/485 serial ports for RC&M
- \* 2U 19" rack mount with integral RF
- \* 1U 19" rack mount with remote RF unit
- \* Summary alarm output
- \* Network port option



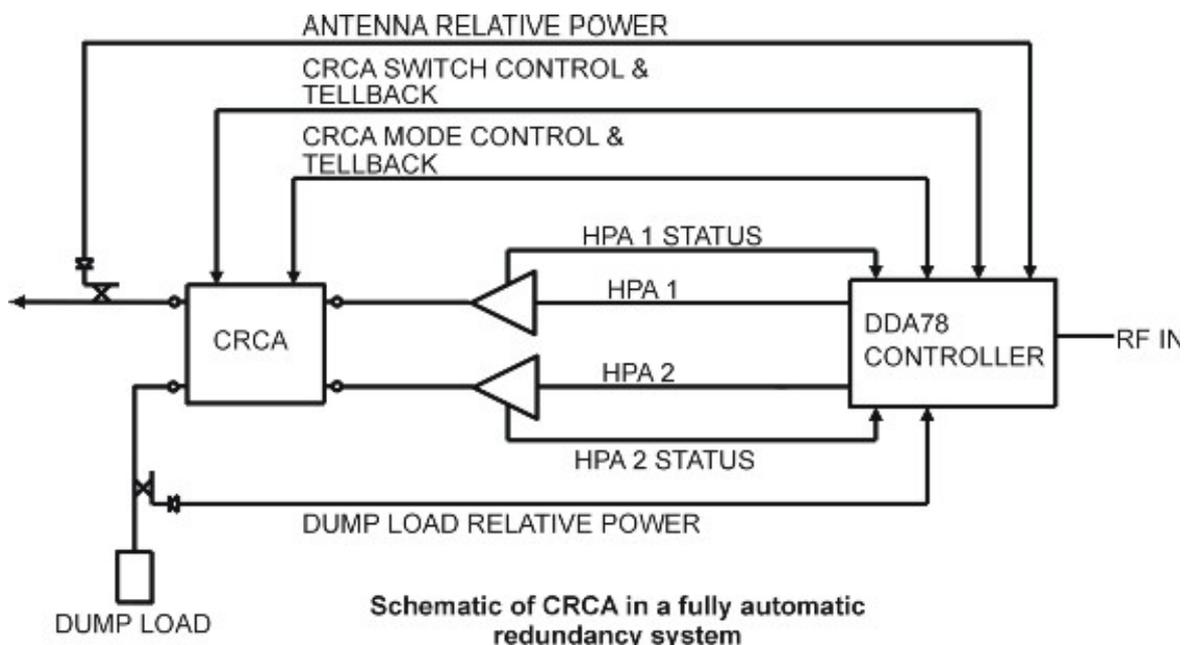
The DDA78 family manages the phase combining of a pair of HPAs using CRCA combiners from manufacturers including Luso, Flann, Mitec and Comdev. It manages the various RF switching options. The package includes the phase adjuster and RF splitter.

Two main configurations are available:

- 2U high rack mount unit incorporating all RF components
- 1U high rack mount unit incorporating the control electronics and user interface, and an associated remote RF pack (DDA223-02) including a motorised phase adjuster and splitter.

The unit will operate with a pair of HPAs from virtually any manufacturer - the main interface requirements are a suitable alarm output from the HPA, and a mute (RF Inhibit) input.

In automatic mode, a failed HPA is switched out, and the remaining operational HPA used.



## SPECIFICATION

- Physical: Controller - 19" rack, 1U or 2U high, 350mm deep (excluding connectors).  
DDA223-02 RF pack (to operate with 1U controllers) - IP65 box 260 x 160 x 90mm excluding connectors.
- Power: 90-254V a.c., 48-62Hz, 150VA max. via IEC mains inlet
- Switching: 9-D socket and 15-D socket for CRCA interface.  
Optional interface for antenna/load waveguide switch
- HPA Interface: 9-pin D-socket per HPA - alarm input accepts volt-free contact or NPN open collector. Volt-free changeover contact for muting.
- Host Serial: 9-pin D-socket; RS-422/RS-485, fixed 9600,7,e,1. Supports "Printable ASCII" and "STX/ETX" protocols. (Note that the phase adjuster and RF levels are not accessible via this port).
- Auxiliary Alarms (option on 2U high units only) - 9-D socket providing two alarm inputs, selectable polarity, intended for connection to fan alarms or overtemperature switches. Also 24V d.c. power output, fused 150mA, for load cooling fan.
- Summary Alarm: 9-pin D-plug; volt-free relay contact signals alarm on any detected fault.
- RF level: Two BNC connector to accept output of diode detector as indication of antenna and load power levels.
- Meters: One or two analog meters or OLED display (dependent on type) show relative power levels. May be adjusted to suit a particular installation.
- Accessories: One or two diode detectors (and associated couplers) are required to measure the output power into the antenna and/or the load - to be procured separately.
- RF connections: a) On 2U high units with integral RF - SMA  
b) On DDA223 RF pack - N-type

### **Ordering Information**

- DDA78-10 2U high controller with integral manual phase adjuster, splitter and isolators for Ku-Band. For Luso Mitec/Comdev CRCA
- DDA78-11 As DDA78-10, for Flann CRCA.
- DDA78-22 1U high controller, supplied with DDA223-02 remote RF pack for Ku-Band. Motorised phase adjuster. For Luso Mitec/Comdev CRCA
- DDA78-23 As DDA78-22, OLED display, network port, additional SHF switch

Many other combinations are possible (including application specific units); please contact the factory to discuss your requirements.