

## FEATURES

- **Redundant Switching** Provides full redundant switching of two *Stellar* HPAs at power levels up to 500 W per channel. Either HPA can be switched to antenna or load.
- **Phase Combination** Combines the output power of two *Stellar* HPAs into one antenna output port or load termination.
- **Integral 1 kW Load** Provides termination on load port to enable combined powers of two *Stellar* HPAs to be dissipated.
- **RS422/RS485** serial port for remote control.
- **Interconnecting Waveguide** between each HPA and the VPC is provided.
- **Power Monitoring** Forward power monitoring is provided in both antenna and load arms. Additionally, forward and reverse couplers are provided in the antenna arm for customer use.

## SPECIFICATION

### Electrical

Prime power . . . . . 120/240 V switchable  
50/60 Hz  
10 W max

### Microwave

Frequency range . . . . . 13.75 to 14.5 GHz  
Power handling . . . . . 500 W/channel

### Input Section (see block diagram)

Input VSWR . . . . . 1.2:1  
Output VSWR . . . . . 1.2:1  
Insertion loss . . . . . 5.5 dB max  
Phase shift . . . . . 200 ° min

### Output Section (see block diagram)

Input VSWR . . . . . 1.2:1  
Output VSWR . . . . . 1.2:1  
Insertion loss . . . . . 0.4 dB max  
Isolation:  
input - input . . . . . 30 dB min  
input - output . . . . . 40 dB  
Integral load power . . . . . 1.0 kW max  
Switching time (adjacent ports) . . . . . 25 ms typ



### Mechanical

Weight . . . . . 15 kg (33 pounds) approx  
Controller dimensions:  
height . . . . . 89 mm (2U) (3.5 inches)  
width . . . . . 483 mm (19.0 inches)  
depth . . . . . 340 mm (13.4 inches)  
Cooling . . . . . natural  
Forced-air cooling of the load is recommended at combined power levels above 700 W.

### Connectors

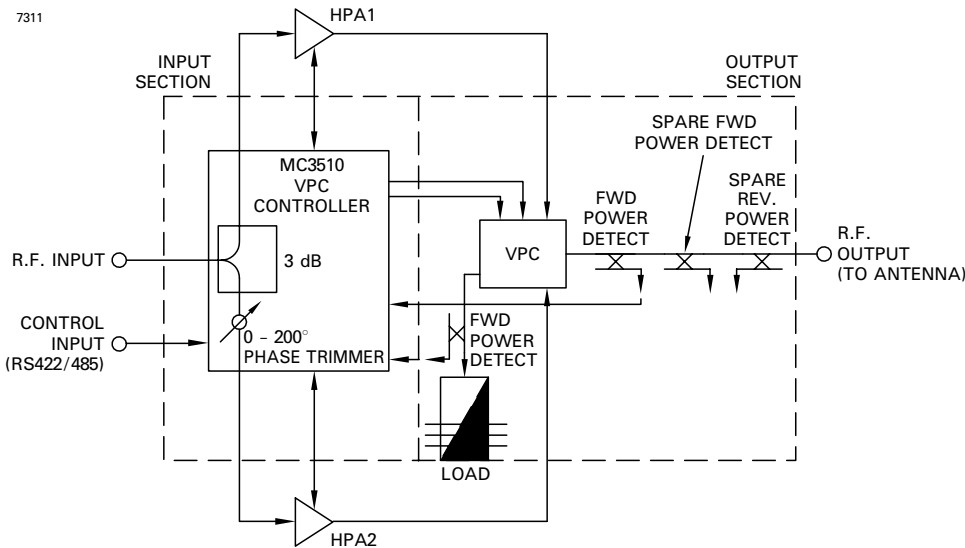
Prime power . . . . . IEC 320  
RF input section . . . . . sma female  
RS 422/RS 485 . . . . . 9-pin 'D'-type socket  
HPA 1 and HPA 2 . . . . . 9-pin 'D'-type plug  
RF output section . . . . . WR 75

### Environmental

Operating temperature . . . . . -20 to +50 °C  
EMC . . . . . EEC 89/336

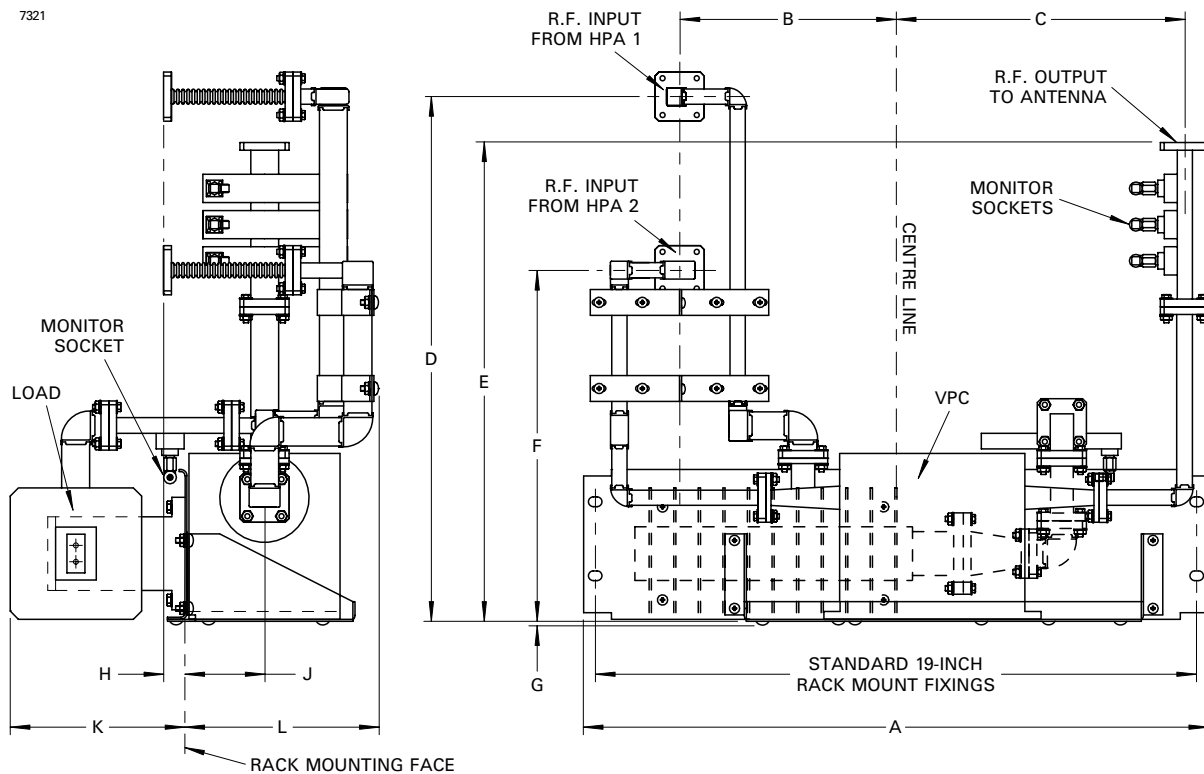
# BLOCK DIAGRAM

7311



# OUTLINE (All dimensions without limits are nominal)

7321



Ref	Millimetres	Inches
A	482	19.0
B	167	6.6
C	223	8.8
D	405	15.9
E	369	14.5
F	270	10.7

Ref	Millimetres	Inches
G	5.0 max	0.197 max
H	16.5	0.650
J	65.5	2.579
K	135.0	5.315
L	150.0	5.906

Inch dimensions have been derived from millimetres.

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