



## High Power Intelligent Redundant System

The new intelligent 1:2 Redundant System is light weight and super-compact due to revolutionary small size Spacepath BUCs/SSPAs. The 1:2 Series offers exceptional reliability, it allows user to operate two separate channels FULLY redundant using only THREE SSPAs/BUCs instead of FOUR SSPAs/BUCs required for each channel 1:1 redundant solution.

The system features extensive monitor & control via serial ports EIA232/EIA485 and Ethernet. The state of the art web browser provides the operator with comprehensive system management tool. Intelligent Redundancy Control module is equipped with illuminated switch control buttons indicating switch positions and providing user with convenient manual switch control

### Options

- Internal 10MHz Reference

### Features

- Super Compact - up to 200W PSAT 1:2 redundant in only 76x147x20cms
- Super Compact - up to 400W PSAT 1:2 redundant in only 81x170x30cms
- Superior RF performance:
  - High Linearity
  - PSAT up to 56 dBm
  - Wide dynamic range of Gain Control
- Extremely High Power Efficiency
- Easy BUC/SSPA unit's replacement without interruption of traffic
- Illuminated switch position indicators
- Manual switch control buttons
- Configuration via RS-232 Serial Console, Packet Protocol RS-485—User friendly HTTP based GUI and SNMP Support
- Pre-set gain equalisation for each channel—no need to equalise gain at switch over
- RF Overdrive protection



Parameter	150W-200W	250W-400W
<b>RF Performance</b>		
RF Frequency Ranges-Available	14-14.5GHz	13.75-14.5GHz
Saturated Power	Up to 53 dBm typ	Up to 56dBm typ
Linear Power	Up to 50dBm min	Up to 53dBm min
Gain	SSPA – 68dB min, 70dB typ	BUC – 75dB min, 77dB typ
Gain Flatness	+/-1.5dB max over full band; +/-0.5dB max over any 40MHz	
Gain Stability over temperature	+/-1.5dB over full temperature range	
Gain Control	20dB min dynamic range	
Linearity: 2 tone IMD Spectral Re-growth	-25dBc at P linear -30dBc for QPSK at 1.5 x symbol rate at P linear +1dB	
Output Spurious: Non-signal related	SSPA – 65dBc max	BUC - 60dBc max
Signal related	SSPA – 60dBc max	BUC - 55dBc max
<b>BUC Version Only</b>		
External Reference Frequency	10MHz multiplexed with IF In	
External Reference Required Phase Noise	-130dBc/Hz @ 100Hz -140dBc/Hz @ 1kHz -150dBc/Hz @ 10kHz -155dBc/Hz @ 100kHz	
Up-Converter Phase Noise	-68dBc/Hz @ 100Hz -80dBc/Hz @ 1kHz -90dBc/Hz @ 10kHz -95dBc/Hz @ 100kHz -115dBc/Hz @ 1MHz	
<b>Power</b>		
AC Voltage Range	190-265VAC 50-60Hz auto-ranging PFC	
Power Consumption at rated power (full system)	3500W typ	6500W typ
Power Consumption at 3dB back off	2800W typ	5500W typ
<b>Mechanical</b>		
Size	76x147x20cms	81x170x30cms
Weight	50KG	102KG
Cooling	Forced Air	
Operating temperature	-40°C to +55°C	
Relative Humidity	Up to 100% condensing	
<b>Interfaces</b>		
RF/IF Input Connector	N-type female	
RF Output Connector	WR75 grooved	
RF Sample	N-type female	
AC Power In	Cylindrical military connectors	
M&C Interface-Serial	Cylindrical military connectors	