

MODULAR SOLID STATE POWER AMPLIFIER 1:1 1000W

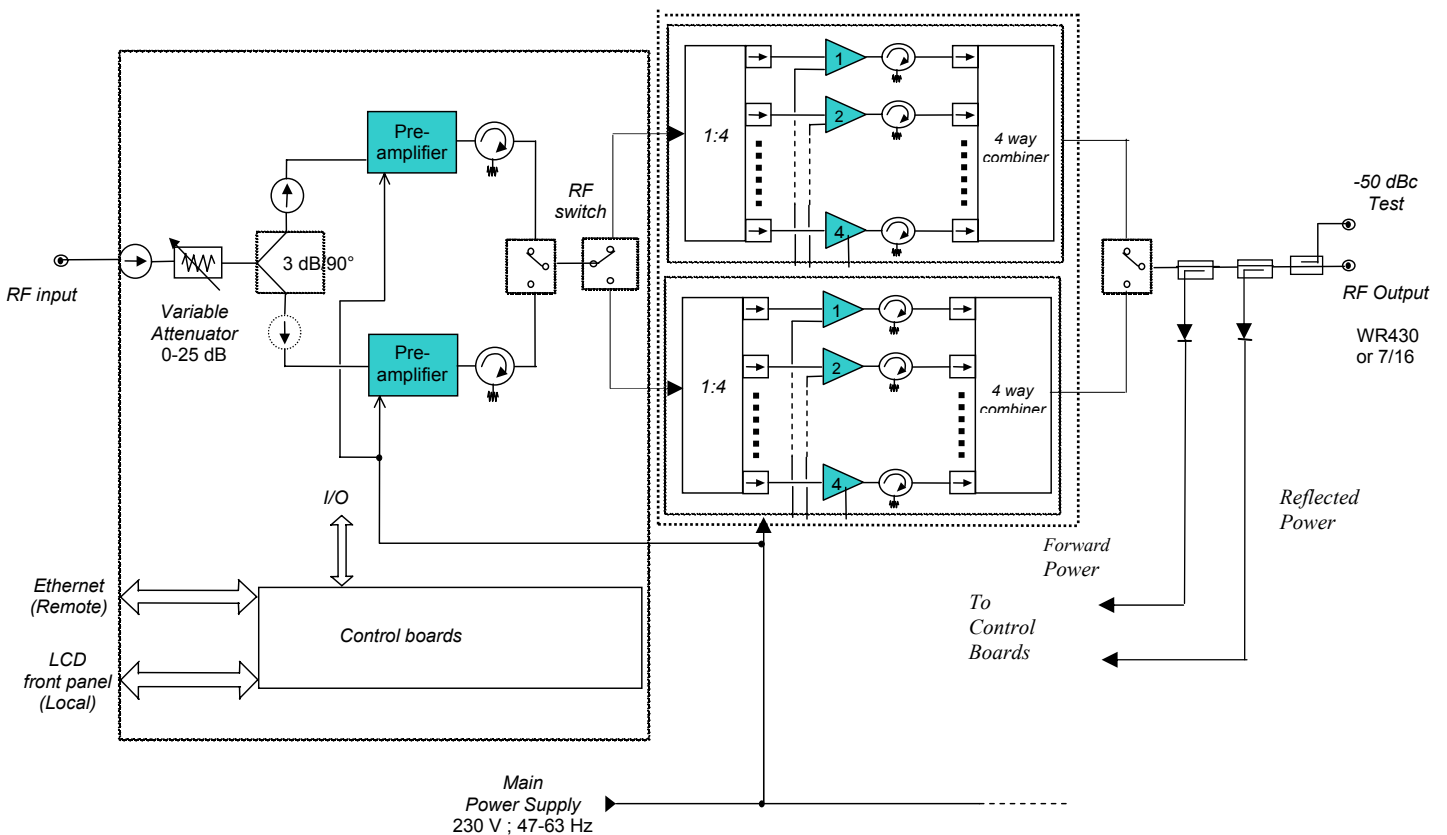
S BAND AB class (1:1 RF20252120 - 1000AB)

- 1:1, 1000W output power @ 1 dB compression
- AB class
- 2 x 4 hot swappable and fully front panel interchangeable 375W drawers
- Power supply unit for each 375W drawer
- Standard 19" - 43U cabinet
- 58 dB minimum gain (25 dB adjustment)
- Fully remote control by Ethernet /fix IP number (option RS232 or RS485)
- -50 dBc RF output sample port
- 3U main power supply drawer
- Temperature protection
- (1 + 1) self redundant preamplifiers
- Front panel monitoring (LCD display) and control
- MTBF > 112 000 hours



Not contractual

1 :1 1000W SSPA architecture



1:1 RF20252120 - 800AB Specifications

Characteristics	Data	Units
Frequency range	2025 - 2120	MHz
RF output power CW at 1 dB compression	1:1 1000	W
Class	AB	
Power gain min.	58	dB
Gain variation in band	< +/-1.5	dB
Gain stability after warming up	< +/-0.5	dB/24H
In/Out impedances nom.	50	Ohms
Input VSWR	1.25 : 1	
output VSWR	1.35 : 1	
Load VSWR for rated output power	up to 1.5 : 1	
Protection circuits	Load VSWR, over-temperature	
Harmonics typ.	-60	dBc
Spurious typ.	-60	dBc
Noise in bandwidth (TX) (full gain)	< -84	dBW/4 kHz
Input gain control	over 25	dB
Noise Figure typ.	10	dB
In/Out RF connectors	N female (In) 7/16 female or WR430** (Out)	** upon request
Cooling	Forced air (self-contained fans)	
Humidity	up to 85	%
Operating temperature range	+10 to +35	°C
Altitude	2000	m
Power supply	230 AC or 380 ** +/- 10 %, 47-63 Hz	V ** upon request
Power consumption typ.	6250	VA
Dimensions (W x H x D)	19" x 43U x 0.8m cabinet	
Weight (typical)	≤ 290 kg	
Monitoring & Control	Local : Front panel LCD/Keyboard (4U) Remote : Ethernet / E-mail alarms messenger	

All data at room temperature +22°C, into 50 Ohms, subject to change without notice.

OPTIONS

**OPTION 1 : SSPA provided with Ethernet interface as base line.
RS485 or RS232 in option.**

OPTION 2 : Antenna / Dummy Load Switch

A switch at the system output can be used for maintenance purpose.
This allows operation of the system either into the antenna, or into the dummy load. This switch is controlled and monitored in Local and Remote modes.

IMPORTANT : the dummy load is located outside the cabinet

OPTION 3 : RF Input Switch (On-Line/Standby modes)

This switch at the system RF input is used to set-up the system either in On-Line or Standby mode. This switch is controlled and monitored in Local and Remote modes.

OPTION 4 : ALC (Automatic Level Control)

This option allows the operator to set-up the output power at a defined level. When ALC mode is selected, the gain adjustment is automatically inactive.

ALC can be used within Phase Combined mode and Redundant mode as well.

This ALC is controlled and monitored in Local and Remote modes.

OPTION 5 : Power output through WR430 waveguide