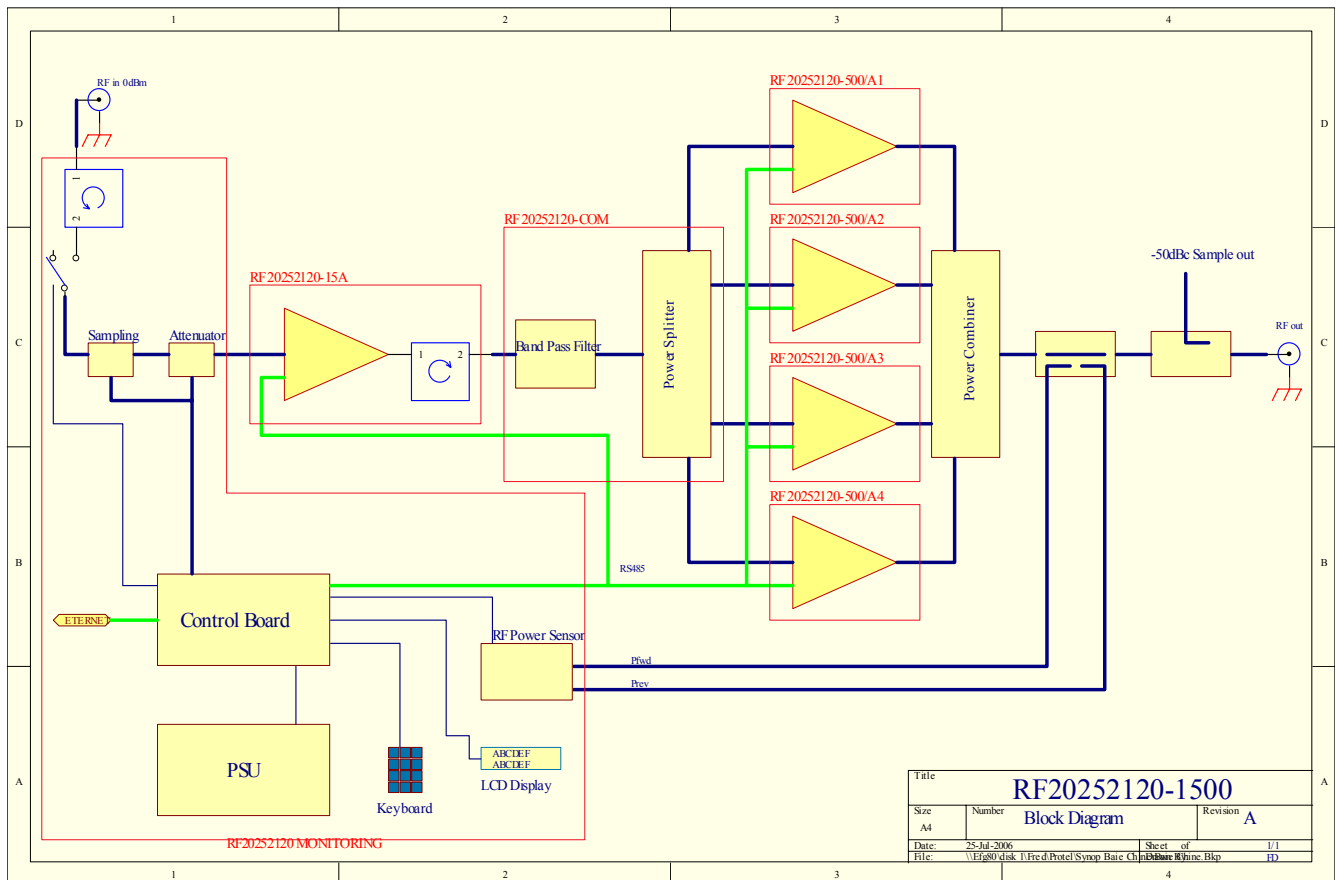


# MODULAR SOLID STATE POWER AMPLIFIER 1500 W S BAND (RF20252120 - 1500)

- 1500W output power @ 1 dB compression
- 4 hot swappable and fully front panel interchangeable 500W drawers
- Power supply unit for each 500W drawer
- Standard 19" - 38U(1.9 m with wheels) cabinet
- 60 dB minimum gain (20 dB adjustment by 0.1 dB step)
- Fully remote control by Ethernet option/fix IP number (RS232 or RS485 in option)
- -50 dBc RF output sample port
- 3U main power supply drawer
- Temperature protection
- Front panel monitoring (LCD display) and control



## 1500W SSPA architecture



## RF2052120 - 1500 Specifications

Characteristics	Data	Units
Frequency range	2025 - 2120	MHz
RF output power CW at 1 dB compression	1500	W
RF output power CW (saturated)	1600	W
Power gain min.	60	dB
Gain variation in band	< +/-1.5	dB
Gain stability after warming up & ALC ON	< +/-0.5	dB/24H
Gain stability over temperature with ALC ON	< +/- 1.5	dB/24H
Gain control	Over 20 dB by 0.1 dB step	
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, over voltage	
Harmonics typ.	-60	dBc
Spurious typ.	-60	dBc
Noise in bandwidth (TX) (full gain)	< -90	dBm/Hz
AM/PM conversion	2°/dB @ 1dB back-off and 1°/dB @ 3dB back-off	°/dB
Two tones intermodulation (5 MHz delta)	-26 dBc @ 3 dB back-off from P1 dB	dBc
Input gain control (gain adjustment)	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
Storage temperature range	-25 to +65	°C
Altitude	2000	m
Power supply	230 AC or 380 ** +/- 10 %, 47-63 Hz	V
Power consumption typ.	6 200 typ.	VA
Dimensions (W x H x D)	19" x 38 U (1.9 m with wheels) x 0.8m cabinet	
Weight (typical)	≤ 220 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  
RS485 or RS232 as base line 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.  
This ALC is controlled and monitored in Local and Remote modes.

**OPTION 5 : Power output through WR430 waveguide**

**OPTION 6: Redundant pre-amplifier**