



Solid State Power Amplifier, 80-1000MHz
57dB Gain, N Female Connectors Input / Output,
500Watts, (0-100%) Duty Cycle



Monitor and Control Unit

Features:

- ▶ Monitored data can be saved for over 10 years on a SD card: Data including voltages, temperatures, forward and reverse power.
- ▶ 3 year Warranty.
- ▶ Saved data can be viewed by LCD.
- ▶ Easy to read bright colored display.
- ▶ The GPIB/ RS232 Interface allows On/Off, and Band Switching by command input through the computer.
- ▶ Available for Pulse Operation (Pulse Width: 50nS/ Rise & Fall Time; 30nS).

Order Examples: RAMP-80-1000M-57d-Nf-Nf-500W-(0-100%)duty-k5

Description: (Amplifier, 80-1000MHz, Gain 57dB, N Female Connectors Input / Output, 500 Watts, 0-100% Duty)

Specifications		Units
Frequency Range	80-1000	MHz
Input/Output Impedance	50	Ω (nominal)
Rated Output Power (P1dB Comp)	500	W(min)/@CW Output
Duty cycle	0.1 to 100	%
In-band Gain	+57.0	dB(min)
In-band Gain Deviation	± 2.0	dB(max)
Input Level	0	dBm @ normal
Maximum Input Level	+3.0	0dBm (max.)
Operation Mode	Class-A	
Input Level	0	dBm@standard input
Harmonics @ Po=500W	-20	dBc(max)
Spurious @Po=500W	-70	dBc(max)
Input VSWR	2:1	(max)
Output VSWR	3:1	(max)
2tone 3rd Order ICP	+67.0	dBm(typ.)
Connectors – RF Input	N Female	
Connectors – RF Output	N Female	
Connectors – EM Input	BNC-Female	See EM Input section below
Connectors – GP-IB	57-20240-D35	
Connectors – Power Supply	M5 Terminal Block	
Power Supply Voltage	AC220V	1 Phase 50-60Hz
Consumption Current	30	A (max.)
Operation Temperature	0 to +40	$^{\circ}\text{C}$

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Specifications		Units
Storage Temperature	-15 to +55	°C
Humidity	15 to 85	% @+25°C (no dew drop)
Cooling Method	Forced Air Cooling	
<u>Outline Dimensions</u> 19" System Rack (EIA Standard/Excluding projection) DA/Control Unit: 5U x 1 Unit FA-1 ~ 8 Unit: &U x 2 Units COM-1 Unit: 5U x 1 Unit	(W)560 x (D)860 x (H)1457.6	mm
Weight	250	kg (max)

Protection Circuit

(1) *Temperature Protection Circuit:*

If an abnormal temperature (caused by a trouble of cooling fan or increase of ambient temperature, etc) is detected inside Power Amplifier Unit, Power Supply Switch is automatically turned off. The shutdown will be shown on front panel LCD.

(2) *Power Supply Protection Circuit:*

If power supply voltage into Power Amplifier Unit runs off the rated value, Power Supply Switch is automatically turned off. The shutdown will be shown on front panel LCD.

(3) *Over Output Power Protection Circuit:*

If Forward Power exceeds 550W of the rated output, RF Switch is automatically turned off. The shutdown will be shown on front panel LCD

(4) *Over Reflection Power Protection Circuit:*

If Reflection Power exceeds 300W of the rated output, Power Supply Switch is automatically turned off. The shutdown will be shown on front panel. LCD

EM Input – Used to shut down power amplifier system.

(Main Power Supply Switch is turned off at TTL= Hi or OPEN)

When Power Supply Switch turns off - LCD on the front panel lights up

When Shut Down - Main power Supply Switch must be manually turned on to restart.

Control Method

Manual Control by Front Panel on Control Unit or by External Control Connector.

*Switching of Remote/Local is available by illuminated push-button switch on the front panel.

External Control

(1) ON / OFF Control of RF SW

(2) Alarm Reset

(3) ON / OFF Information on RF SW

(4) Information on FWD Alarm

(5) Information on REF Alarm

(6) Information on TEMP Alarm

(7) Information on PS Alarm

(8) Information on EM

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Alarm

- (1) Temperature Alarm (TEMP. ALM)
- (2) Power Supply Alarm (P.S. ALM)
- (3) Over Output Power Alarm (FWD ALM)
- (4) Over Reflection Power Alarm (REF ALM)
- (5) Emergency (EM)

Warranty Period 3.5 Years after Delivery

Note

System Rack is included.
Output Circulator is NOT built-in.

Alarm Criteria

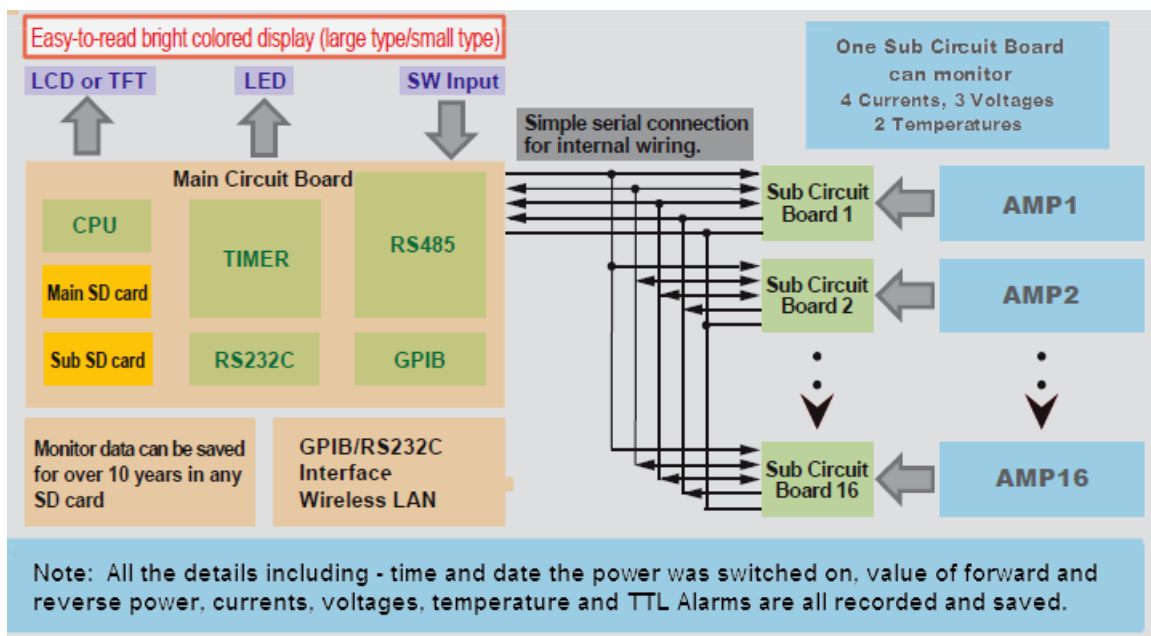
If Output Amplifier Circuit System fails, Self-Diagnosis Function activates and outputs the status as follows:

- (1) Display Output to Alarm Circuit on the front panel
- (2) All data recorded in "Past Operation Record and (1)above are available for output from a SD card installed in an internal control board.

Reading record is available only by opening the cover of Power Amplifier Unit.

Product Components

RF Power Amplifier (Rack) 1 unit
AC Power Supply Cable 1 piece
Attached Documents Operational Manual/Test Report 1 copy ea



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