



RADCOM's Platform Specifications

Valid from **Version 7.10**

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Safety Precautions



NOTE

Adhere to the following safety precautions to reduce the risk of electric shock or fire.

- All servicing of the Performer and R70 units should be undertaken **only** by qualified service personnel. There are no user serviceable parts inside the Performer. Contact your local representative for information concerning repair.
- The Performer and R70 operate with 100V-240V AC.
- Connect the Performer/R70 to a wall power socket with a voltage of 100V-240V AC only.
- Do not plug in, turn on or attempt to operate an obviously damaged unit. Contact your local representative to arrange the return of a damaged unit.
- Permanent damage may be caused to the Performer/R70 if the stated clearance requirements on the side and underneath the Performer are not met.
- Do not operate the unit if the maximum ambient temperature exceeds 40° C (104° F).
- Do not attempt to open the unit's case. Consult your representative about any changes to be made to the hardware configuration.

Maximum Load Permitted

- The R1000 and P1000 have 4 PCI card slots. Slots 1, 2 and 3 are located on the left side of the backplane, and the fourth (PCI 4) is located on other side of the backplane, above the SBC.
- The maximum load for PCIs 1, 2 and 3 is 35 watts each. The PCI 4 slot is intended for a half-size PCI card. When the R1000 or P1000 include a Sync Card configuration, the Sync Card is installed in PCI slot 4. The maximum load for PCI 4 is 5W.

- The R4000 has four SBC segments. Each segment has 3 PCI slots (PCI slots 1, 2 and 3). The maximum load of PCI 1 and 2 is 35W each. The third slot (PCI 3) is intended for a half-size PCI card. When the R4000 includes a Sync Card configuration, the Sync Card can be installed in any segment, but is usually installed in slot 3.
- The R70 can accommodate up to three LIMs of any type.

Lithium Battery Warning

DANGER

- Risk of explosion if battery is replaced by an incorrect type.
- Before battery replacement, turn off the unit and disconnect the power cord from the unit.
- Dispose of used batteries according to instructions.

Lithium Battery Warning

- The SBC includes a lithium battery. There is danger of explosion if the battery is incorrectly replaced. If you have to replace the lithium battery, replace only with the same or equivalent type of battery.

Recycling Lithium Batteries



CAUTION

Do not handle damaged or leaking the lithium batteries. You can help preserve the environment by returning your used batteries to your nearest collection and recycling location. For more information regarding rechargeable batteries, visit <http://www.rbrc.org/>.

Installing in a Rack Mount (R1000, R4000 and R70)

- Install the Performer/R70 on rack mount slides and fasten the unit's rack mount brackets with screws to the cabinet.
- Make sure that you have free access to the power cord plug (to plug in and unplug the unit).
- Make sure that the rack is ventilated

Site Requirements

Before unpacking your Performer/R70, verify compliance with the following conditions:



CAUTION

Permanent damage may be caused to the Performer/R70 if the following requirements are not met:

Power	Your Performer/R70 should be installed within 1.5 m (5 ft.) of an easily-accessible grounded AC outlet capable of supplying 100V-240V AC \pm 10%.		
Side and Bottom Clearance	Allow at least 10 cm (4 inches) clearance on each side of the Performer/R70 for proper ventilation. The Performer/R70 should be placed on a hard, flat surface in order to avoid obstruction of the ventilation slits.		
External Environment	<p>Normal conditions:</p> <ul style="list-style-type: none"> • Temperature: 22° C +/- 2° C • Humidity: 50% relative humidity +/- 5% <p>Extreme conditions:</p> <ul style="list-style-type: none"> • Temperature: 0-45° C • Relative humidity: 10-90% • Absolute humidity: less than 25g/m³ • Dust: up to 75 mg/m³ 		
AC Voltage Source	Voltage:	Nominal Value	100V, 220V
		Range of Variation	90V-264V
	Frequency:	Nominal Value	50Hz
		Range of Variation	48Hz-52Hz
	Form Factor:	Nominal Value	1.11
		Range of Variation	1.08 - 1.14
	Harmonic Distortion:		max. 5%
DC Voltage Source	Power:	Distribution cabinet supplying (nominal) -48V DC	
		Range of variation 42V to -56V	

Performer R1000 Unit

Specifications: R1000, Rack-mount 2U, Performer/Probe Server

- HW: Pentium 4, 2.4Ghz; 1 GB DDR, 266 MHz; 80 GB Hard disk
- Number of FEPs: Up to 2, plus Sync card
- Dimensions: w x d x h: 440 x 470 x 89 mm (17.5 x 18.7 x 3.5 in).
- Weight: 9.2 Kg (20.3 lb)
- Power: 100V – 240V AC auto-range, Maximum 300W.

External Environment

Normal conditions:

- Temperature: 22° C +/- 2° C
- Humidity: 50% relative humidity +/- 5%

Extreme conditions:

- Temperature: 0-45° C
- Relative humidity: 10-90%
- Absolute humidity: less than 25g/m³
- Dust: up to 75 mg/m³

Altitude: 12,000 feet

MTBF 38,000 hours

The back and front panels of the Performer Rack Mount R1000 unit appear as follows:

Back Panel

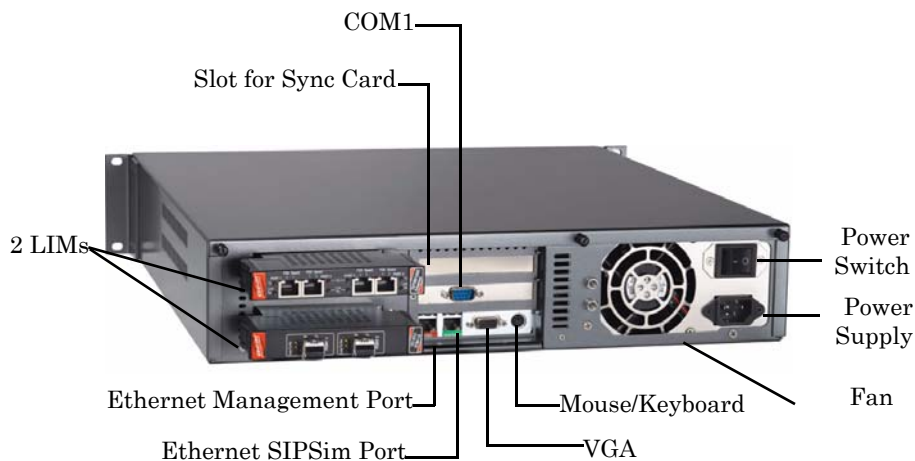


Figure 1: Performer R1000; back panel

Front Panel

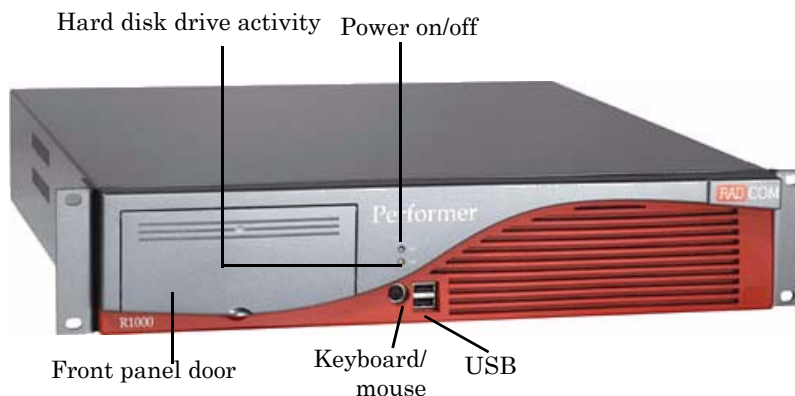


Figure 2: *Performer R1000; front panel*

Inside the front panel door are the red reset button, the yellow shutdown button, the black power switch and the CD-ROM. Use the black power switch to turn the Performer unit on. The red reset button resets the Performer, only use this button if the system freezes. Use the yellow shutdown button to execute a proper software shut down and to turn off the Performer properly. You should only use the yellow button to turn off the Performer unit.

To run the R1000:

1. Connect the power cable.
2. Turn on the switch at the back of the unit.
3. Open the front door panel.
4. Press the black button.

Performer P1000 Unit

Specifications: P1000, Portable Performer Server

- HW: Pentium 4, 2.4Ghz; 1 GB DDR, 266 MHz; 80 GB Hard disk
- Number of FEPs: Up to 3, plus Sync card
- Dimensions: w x d x h: 340 x 420 x 116 mm (13.4 x 16.5 x 4.6 in).
- Weight: 8.2 Kg (18.0 lb)
- Power: 100V – 240V AC auto-range, Maximum 300W.

External Environment

Normal conditions:

- Temperature: 22° C +/- 2° C
- Humidity: 50% relative humidity +/- 5%

Extreme conditions:

- Temperature: 0-45° C
- Relative humidity: 10-90%
- Absolute humidity: less than 25g/m³
- Dust: up to 75 mg/m³

Altitude: 12,000 feet

MTBF

38,000 hours

The P1000 unit is the portable version of the Performer. You can position this both in a horizontal position and a vertical position. The P1000 unit comes with a unique carrying case with space for the LIMs and appropriate cables, which you can order separately.

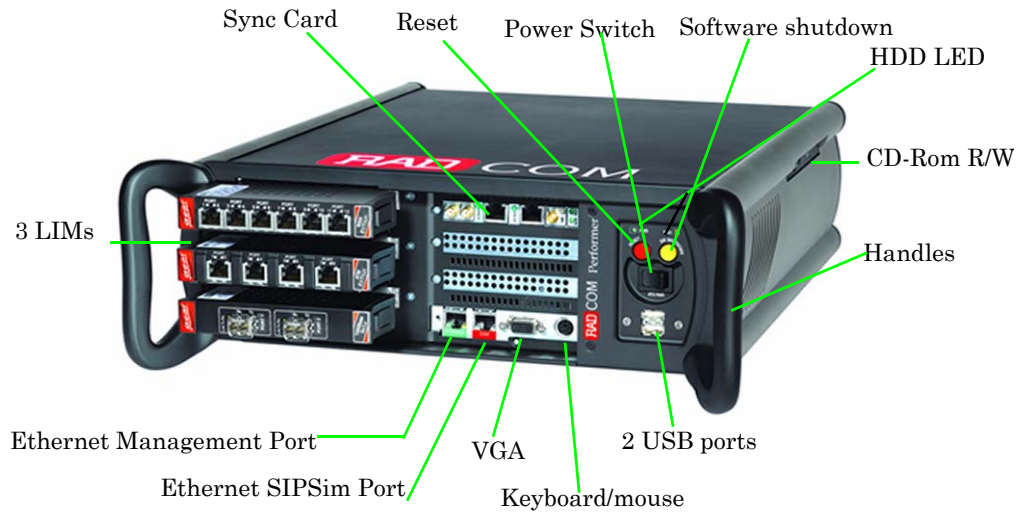


Figure 3: P1000 Horizontal, front view

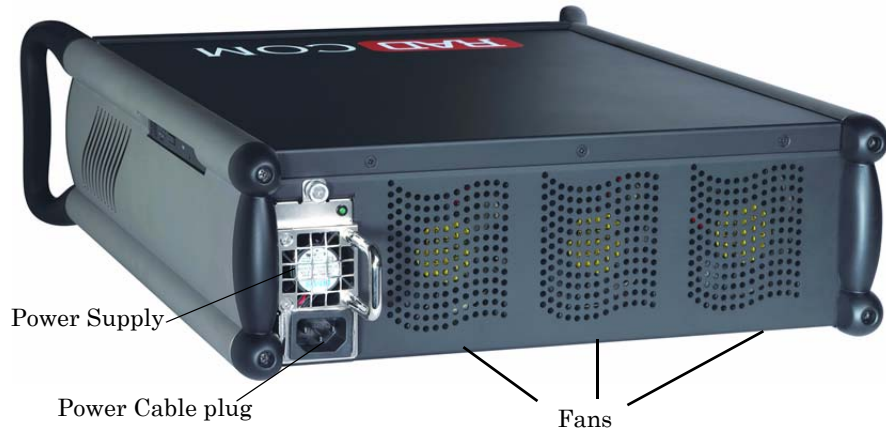


Figure 4: P1000 Horizontal Rear View



Figure 5: *P1000, Front View, vertical*

Performer R4000 Unit

Specifications: R4000, Rack-mount 5U, Probe

Consists of 4 independent segments, each including:

- HW: Pentium 4, 2.4Ghz; 1 GB DDR RAM, 266 MHz; 80 GB Hard disk; 7200 RPM
- Number of FEPs: Up to 8, plus four Sync cards (one per segment)
- Dimensions: w x d x h = 430 x 680 x 220 mm (17 x 27 x 8.7 in)
- Weight: 30 Kg (66.25 lb)
- Power: 100V – 240V AC auto-range, Maximum 1000W.
- Power dissipation 800 W
- Input power 100-260 VAC
- Installation Rack mount 19" (21" option)
- Mean Time Between Failure: 18,000 hours
- Operating system: Microsoft Windows XP

External Environment

Normal conditions:

- Temperature: 22° C +/- 2° C
- Humidity: 50% relative humidity +/- 5%

Extreme conditions:

- Temperature: 0-45° C
- Relative humidity: 10-90%
- Absolute humidity: less than 25g/m³
- Dust: up to 75 mg/m³

Altitude: 12,000 feet

MTBF

20,000 hours

The Performer R4000 unit consists of four Performer segments in one box. The back and front panels of the Performer R4000 Rack Mount unit appear as follows:

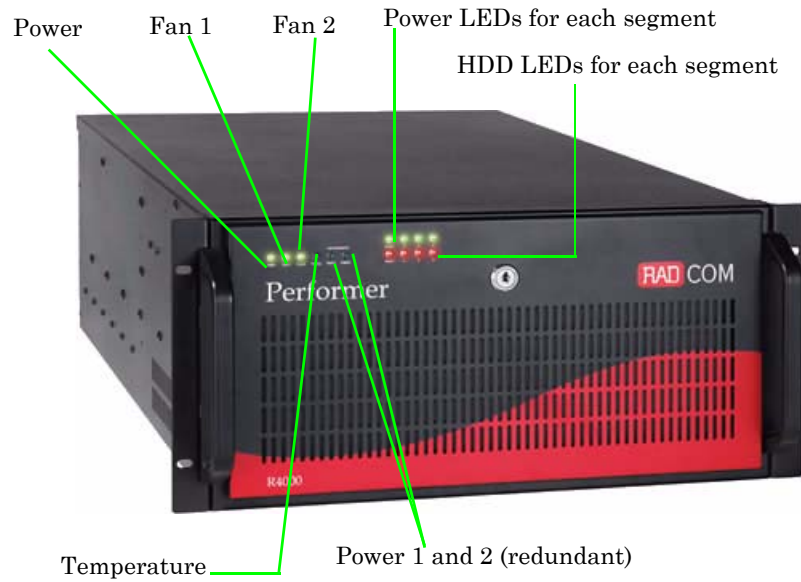


Figure 6: R4000 unit, front view

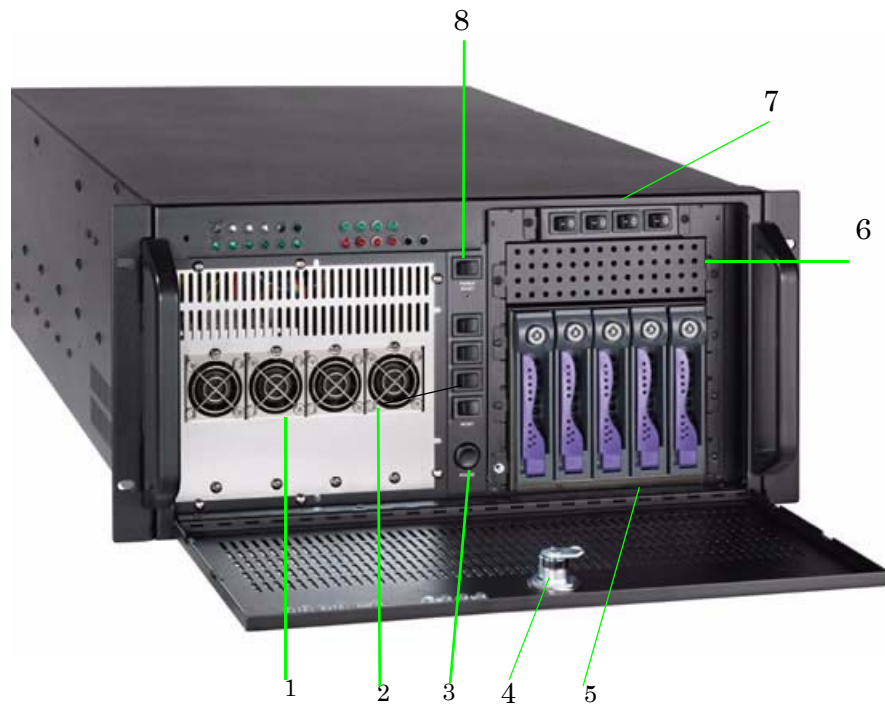


Figure 7: R4000 front view with door open

Number	Explanation
1	Power supply for each segment
2	4 reset buttons (one for each segment)
3	Power button
4	Key
5	4 hard disks (and a spare one)
6	Future place for CD-ROM and USB
7	Momentary power switch for each segment
8	Power reset



Figure 8: *Performer R4000 back view*

Number	Explanation
1	2 USB ports
2	2 LIMs for each segment
3	Power supply
4	Power switch
5	Ethernet Management Port
6	Ethernet SIPSim Port
7	VGA
8	Keyboard/mouse

All of the above elements (apart from the power supply and power switch) appear for each segment.

R70 Probe

Specifications: R70, Rack-mount 2U

- HW: RADCOM's proprietary embedded high-end solution
- Number of PIMs (plug-in modules): up to 4
- Number of LIMs (line interface modules): up to 3
- Synchronization methods supported: GPS, NTP and local synchronization
- Dimensions: w x d x h: 440 x 540 x 89 mm (17.5 x 21.3 x 3.5 in).
- Weight: 8 kg (17.6 lb)
- Power: 100V – 240V AC auto-range, Maximum 180W; Single or dual power supply (redundancy mode).
- Power: – 48V DC, Maximum 180W; Single or dual power supply (redundancy mode).

External Environment

Normal conditions:

- Temperature: 22° C +/- 2° C
- Humidity: 50% relative humidity +/- 5%

Extreme conditions:

- Temperature: 0-55° C
- Relative humidity: 10-90%
- Absolute humidity: less than 25g/m³
- Dust: up to 75 mg/m³

Altitude: 12,000 feet

MTBF

- 38,000 hours single AC or DC power supply
- 43,000 hours dual AC or DC power supply

To run the R70, connect the power cable and press the power button on the right side of the front panel. To shut off the R70, press the power button.

Following are several views of the R70:



Figure 9: R70 Front View



Figure 10: R70 with LIMs Displayed

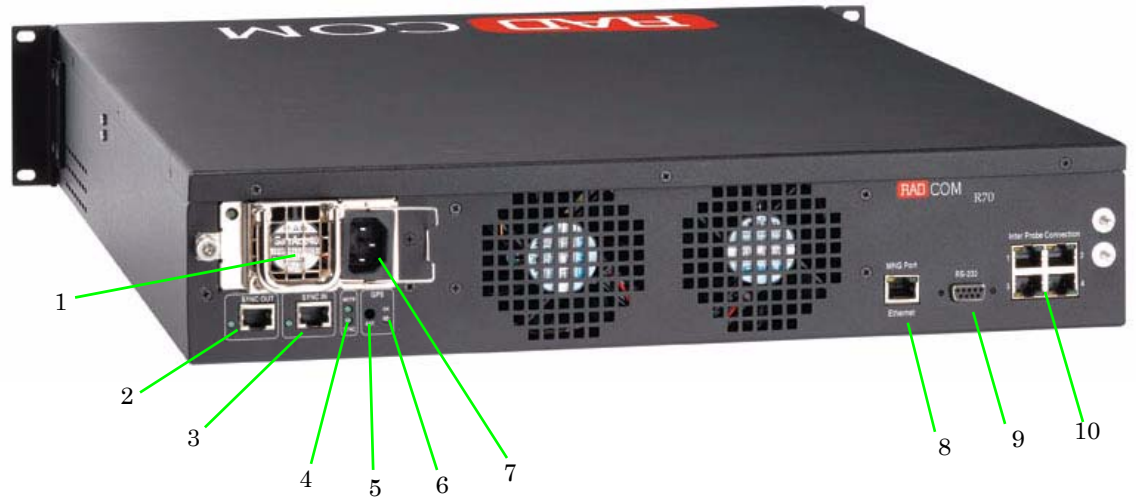


Figure 11: R70 Rear View

Number	Explanation
1	Power Supply
2	Sync Out
3	Sync In
4	Sync Status LEDs
5	GPS Antenna Connector
6	GPS Status LEDs
7	Power Inlet
8	10/100/1000 Ethernet Management Port
9	RS-232 Port
10	Inter-Probe Connection Ports

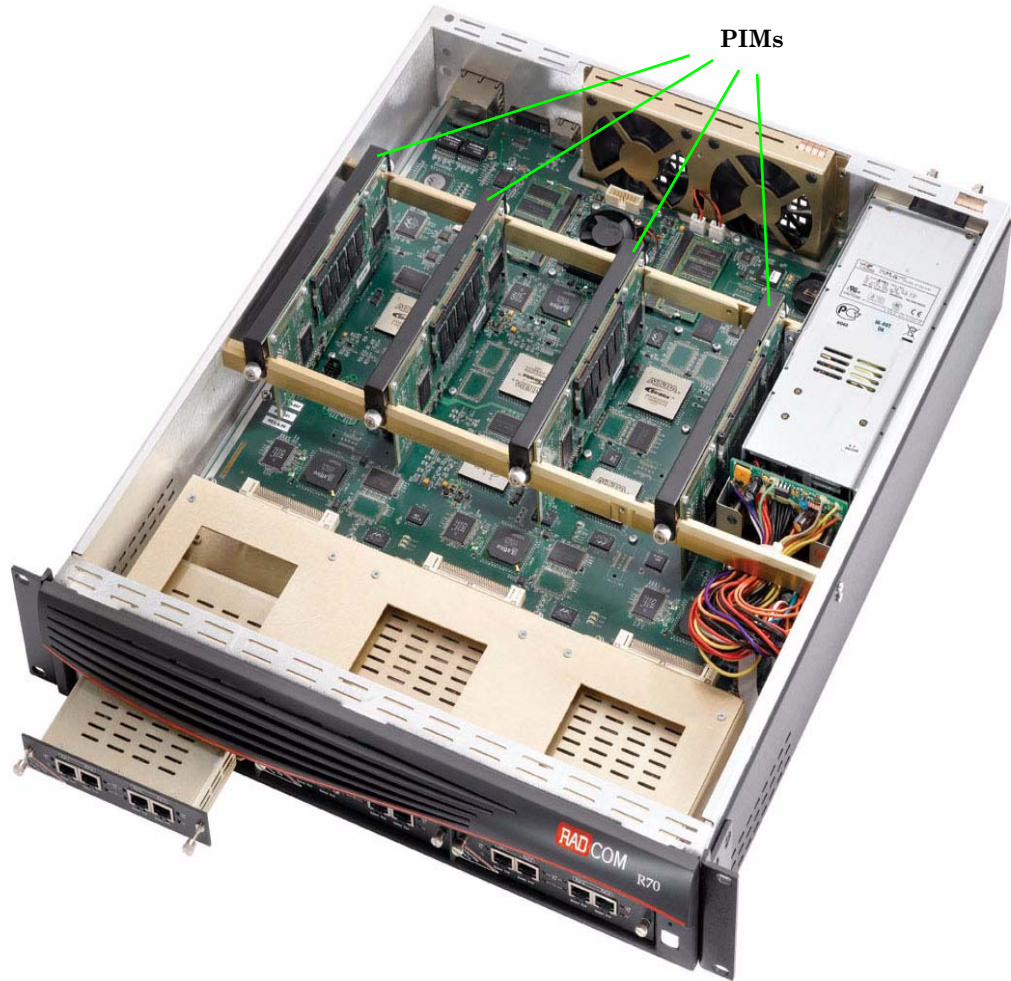


Figure 12: R70 Inside View



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