

## AR1000 Series Embedded Computers



Front View



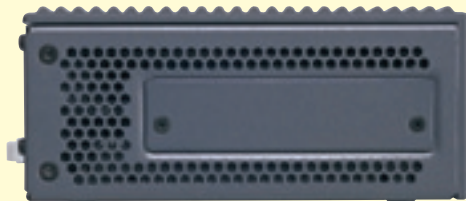
Front Panel



Rear Panel with USB 2.0



Rear Panel with Firewire and Audio



Left Panel

### Applications:

- Industrial automation
- Healthcare
- Transportation
- Security

### Description:

PFU Systems' AR1000 Series Embedded Computers are general-purpose, compact and rugged standard off-the-shelf systems with a small footprint that are ideally suited for high performance space-challenged applications.

The AR1000 Series feature dual front panel USB 1.1 ports allowing convenient access for peripherals, including keyboard and mouse. Serial ports provide easy access for control interfaces and communication hardware. Integrated 3D graphics acceleration and a standard VGA port enable vivid graphic applications. Dual PC Card slots allow user-defined I/O expansion, such as Wi-Fi. A RJ45 Fast Ethernet LAN interface with built-in PXE (Pre-boot Execution Environment) code permits boot-over-LAN for diskless operation.

The AR1500 with USB 2.0 includes dual USB 2.0 ports for I/O expansion and connectivity to high speed-peripherals. The AR1510 with FireWire™ includes dual IEEE 1394a ports for high-speed imaging devices and peripherals and stereo audio line-out and line-in jacks.

A feature rich BIOS supports MultiBoot III for automatic recovery from a failing boot device. Low power dissipation is achieved with ACPI and APM power management. An extensive system BIOS setup interface allows optional password protection and provides legacy USB support for environments that do not include support for USB.

The AR1000 Series Embedded Computers may be ordered in various configurations of CPU speed, SDRAM memory capacity, hard disk drive size capacity and operating system. Accessories such as IDE CompactFlash storage cards and wireless LAN PC Card adapters are also available from PFU Systems. The AR1000 Series are available as an ODM product with OEM branding. Special configurations with solid-state hard disk drives, ODM-specific BIOS defaults and power-on screens are also available through PFU Systems ProDeS™ service. Please contact your PFU Systems sales representative for further details.

SPECIFICATIONS SUMMARY

FEATURE	SPECIFICATION
<b>CPU &amp; CHIPSET</b> CPU	Ultra Low Voltage Intel® Celeron® processor at 400MHz Ultra Low Voltage Intel® Celeron® processor at 650MHz Intel® Pentium® III processor - Low Power at 933MHz
Chipset	Intel® 815E Chipset, Intel® 82801BA ICH2
Ethernet	Intel® 82801BA integrated MAC with Intel® 82562ET PHY, 10/100Base-T with PXE
CardBus Controller	Ricoh R5C476II (PSAR1500xxx)
IEEE 1394a & CardBus Controller	Texas Instruments PCI4520 (PS1510xxx)
Audio Codec	Analog Devices AD1885, AC '97 (PSAR1510xxx)
<b>PERIPHERAL I/O</b>	
Keyboard	PS/2 connector
Mouse	PS/2 connector
Serial	2x RS232C on D-Sub 9-pin connectors (PSAR1500xxx) 1x RS232C on D-Sub 9-pin connector (PSAR1510xxx)
VGA	15-pin VGA D-Sub connector
Ethernet	RJ45 connector
USB	2x USB 1.1 type A connectors 2x USB 2.0 type A connectors (PSAR1500xxx)
FireWire™	2x IEEE 1394a 6-pin connectors (PSAR1510xxx)
CardBus	2x Type II slots or 1x type III slot
CompactFlash	1x Type II slot, internal
Audio – Stereo Line Out and Line In	2x 3.5mm jacks (PSAR1510xxx)
Power Switch	Momentary button
Status LED	Power, HDD
<b>IMPORTANT BIOS FEATURES</b>	
MultiBoot III	Auto-recovery from a failing boot device
PXE	Boot-over-LAN
USB Boot	USB CD/DVD ROM Devices
USB Legacy Support	USB keyboard & mouse support for legacy operating systems
Power Management	ACPI 2.0 and APM 1.1
<b>OPERATING CONDITIONS</b>	
Ambient Temperature	5 – 40°C with rotating drives, 0 – 50°C with solid-state drives
Humidity	5 - 90% RH, non-condensing
AC Adapter	12VDC, 3.5A (PSAR1500xxx), 16VDC, 3.5A (PSAR1510xxx)
Shock	20G
Vibration	0.4G with rotating drives, 2.2G with solid-state drives
MTBF	50,000 Hours
Cooling	Internal fan
<b>PHYSICAL</b>	
Dimensions	170mm x 135mm x 58.5mm
Weight	2000 g (without hard disk drive)
<b>STORAGE</b>	
Ambient Temperature	-20 - 60°C
Humidity	5 - 95% RH, non-condensing
Shock	20G
Vibration	1.0G with rotating drives, 2.2G with solid-state drives
Standard Certifications	CE, CSA, FCC Class B, TUV, VCCI

ORDERING INFORMATION:

ITEM	PART NO.
<b>AR1500 Embedded Computers</b>	
933MHz AR1500 with USB 2.0	PSAR1500933
650MHz AR1500 with USB 2.0	PSAR1500650
400MHz AR1500 with USB 2.0	PSAR1500400
933MHz AR1510 with FireWire™	PSAR1510933
650MHz AR1510 with FireWire™	PSAR1510650
400MHz AR1510 with FireWire™	PSAR1510400
<b>Accessories</b>	
128MB, 256MB, 512MB PC133 SDRAM	PSDM128S133, PSDM256S133, PSDM512S133
20GB, 40GB, 60GB 2.5" ATA100 HDD	PS25PHD20A, PS25PHD40A, PS25PHD60A
128MB, 512MB IDE Compact Flash	PS2CF128A, PS2CF1512A
802.11b/g 32bit CardBus Card	PSPC80211A
<b>Operating Systems</b>	
Microsoft® Windows® 2000 Professional	PSMSW2KA
Microsoft® Windows® XP Professional	PSMSWXPA
RedHat Linux	PSRHLxx
SuSE Linux	PSLxx
FreeBSD	PSFBSDxx

SALES OFFICES

Headquarters & Int'l Sales Office

PFU Systems, Inc.  
1331 Lawrence Expressway, Ste 200  
Santa Clara, CA 95051-3501  
Phone: +1.408.236.3000  
Fax: +1.408.236.3099

Midwest Sales Office

PFU Systems, Inc.  
2600 Fernbrook Lane, Ste 130  
Plymouth, MN 55447-4752  
Phone: +1.763.551.8261  
Fax: +1.763.551.8265

For more information and a list of dealers and representatives near you visit: <http://www.PFUsystems.com> or call your nearest PFU Systems office listed at the left.

PFU Systems, Inc. does not warrant its products for use in applications which may involve dangers to human health or safety, including but not limited to medical life support, surgery, aircraft flight control, air traffic control, mass transportation control, missile launch and/or guidance control, environmental control, or the planning construction, maintenance, and operation of a nuclear facility.

PFU Systems, Inc. reserves the right to make changes to its products and product specifications at any time without notice. PFU Systems, Cell Computing, HardBrick, Blazor, Plug-N-Run, RazorBlade®, Fail-Safe-Boot, and Signature are trademarks of PFU Systems, Inc. All other trademarks and registered trademarks are property of their respective holders. ©2000-2004 PFU Systems, Inc. All rights reserved.

