

**Smart choice for work and play.**

**ENJOY DIGITAL PHOTOS<sup>11</sup>**

Create your own digital photo album with Sony PictureGear Studio™ software.

**MUSIC AND ENTERTAINMENT**

Download. Rip. Transfer. Burn. Make your custom CDs with Sony SonicStage™ software!

**EASY MOVIE EDITING**

Capture, edit, and share your videos with Sony DVGate™ Plus software!



**Sony Exclusive MULTIMEDIA DIGITAL EDITING software package!**



**FEATURES**

- Capture, edit and share your digital photos and videos with Sony's exclusive digital editing software package
- i.LINK® (IEEE 1394) S400 digital interface<sup>3</sup>
- Memory Stick® slot<sup>10</sup> allows you to transfer digital pictures, music and data
- Powerful notebook with affordable price

**SPECIFICATIONS**

**Model**  
PCG-FRV23

**Processor**  
Intel® Celeron® processor 2.20GHz<sup>1</sup>

**Cache Memory**  
256 KB integrated on-die level 2

**Bus Speed**  
400 MHz

**LCD**  
15" XGA (1024x768) TFT display

**Graphics**  
ATI RADEON IGP 345M 64MB (shared)

**Memory**  
512 MB DDR SDRAM (256MB x 2), expandable to 1024MB

**Hard Drive**  
40 GB<sup>2,12</sup> hard drive

**CD-RW/DVD Combo Drive**  
Internal CD-RW/DVD combo drive<sup>7</sup>  
(Max speeds: CD-R write 24x, CD-RW write 10x, CD-ROM 24x, DVD-ROM read 8x)

**Optional Floppy Drive**  
External 1.44 MB, 3.5" USB floppy drive (PCGA-UFD5)

**Modem**  
Integrated V.90 modem

**Ethernet**  
10BASE-T/100BASE-TX Ethernet with RJ-45 interface

**Memory Stick® Media Slot<sup>10</sup>**  
Supports optional Memory Stick® media

**Pointing Device/Keyboard**  
Electro-Static touch pad  
86 key QWERTY layout, with 2.7mm stroke and 19.19mm pitch

**Estimated Battery Life<sup>4</sup>**  
Lithium-ion battery 2.0-2.5 hours<sup>4</sup>

**PC Card Slots**  
Two type I or II, or one type III card slot; CardBus support

**Audio**  
Windows® sound system compatible with 3D surround  
Built-in stereo speakers; monaural mini-jack microphone

**Other Interfaces**  
i.LINK® (IEEE 1394) interface<sup>3</sup>, AV out (mini jack), 3 USB 2.0 ports, RJ-11 modem jack, RJ-45 Ethernet, VGA output, parallel, headphone (stereo), mic-in

**Power Requirements**  
135 watts maximum +/- 10% (19.5V / AC100-240V)  
Energy Star® compliant  
Advanced power management - APM-ACPI compatible

**Size (H x W x D)**  
1.65" - 2.26" X 13" X 10.8"

**Weight**  
7.72 lbs. with one battery

**Supplied Accessories**  
Lithium-ion battery, power cord, AC adapter

**Optional Accessories**

Additional battery (PCGA-BP2NX)  
USB optical mouse (PCGA-UMS5)  
USB mobile mouse (PCGA-UMS3/V)  
Carrying case (PCGA-CCF)  
Notebook backpack (PCGA-CCP1)  
Sport backpack (PCGA-CCP2)  
Neoprene notebook & AC adapter cases (PCGA-CCN1)  
External speakers (PCGA-SP1)  
Additional AC adapter (PCGA-AC19V7)  
Visual communication camera (PCGA-UVC10)  
USB Bluetooth adapter (PCGA-BT1/A)  
External USB keyboard (PCGA-UKB1)  
External DVD-RW drive (PCGA-DVRW1)<sup>9</sup>  
802.11b Wireless LAN Pro access point (PCWA-A200)  
802.11b Wireless LAN Bridge access point (PCWA-A220)  
802.11b Wireless LAN PC card (PCWA-C150S)  
802.11a Wireless LAN access point (PCWA-A500)  
802.11a Wireless LAN PC card (PCWA-C500)  
802.11a/11b Wireless LAN Dual PC card (PCWA-C700)

**Service and Warranty Information**  
One year limited hardware Express Service<sup>5</sup> (Certain restrictions apply.)  
One year limited hardware parts and labor<sup>5</sup>  
Telephone Support<sup>6</sup>: One year hardware from purchase date  
Sony and Microsoft software: 90 days from purchase date

**Included Operating System**  
Microsoft® Windows® XP Home Edition

**Productivity**  
Microsoft® Money 2003<sup>8</sup>  
Microsoft® Works 7.0  
Microsoft® Encarta Online<sup>7</sup>

**Video Software**  
Sony DVgate™ Plus  
InterVideo® WinDVD® 4 for VAIO® PC

**Music Software**  
Sony SonicStage™  
RealNetworks® RealOne™ player

**Photo Software**  
Sony PictureGear Studio™  
Sony Network Smart Capture

**Communication**  
Sony VAIO Media™ Software  
Microsoft® MSN 8.0<sup>9</sup>  
America Online<sup>68</sup>

**Gaming**  
Microsoft® Age of Empires

**Virus, Tools, and Support Software**  
McAfee® Internet Security Center Trial<sup>9</sup>  
VAIO Support Agent

- 1 GHz denotes microprocessor internal clock speed; other factors may affect application performance. CPU speed may be reduced under certain operating conditions.
- 2 GB means one billion bytes when referring to hard drive capacity. Accessible capacity may vary.
- 3 i.LINK is a trademark of Sony used only to designate that a product contains an IEEE 1394 connector. All products with an i.LINK connector may not communicate with each other.
- 4 Estimated battery life. Actual battery life may vary on usage.
- 5 From date of purchase.
- 6 Certain features are time limited.
- 7 Limited duration trial subscription to Microsoft's current online version. Internet access required; additional fees (including telephone/long distance charges) may apply also.
- 8 Requires fees for use.
- 9 DVD+R and DVD+RW discs recorded on this drive will playback in most consumer DVD players and computer DVD-ROM drives
- 10 Supports Memory Stick Pro™ high-capacity media, but does not support high-speed media capability. Does not support MagicGate™ functionality.
- 11 Digital still camera is not included.
- 12 5GB of hard disk space is reserved as a recovery partition.

Computer Interface: The computer industry lacks standards, and therefore, there are a multitude of varying software packages and add-on hardware options. This personal computer is not manufactured to any specific software, and Sony does not and cannot make any warranty or representation with respect to the performance of this product with any particular software packages and/or non-Sony add-on hardware option except those mentioned in this document. Sony hereby disclaims any representations or warranty that this product is compatible with any combination of products you may choose to connect. While Sony representatives or Sony authorized dealers may be able to assist you and may make recommendations, they are NOT authorized to vary or waive this disclaimer. Purchasers must determine for themselves the suitability and compatibility of the hardware and software in each and every particular instance. Software titles pre-installed on the Sony Notebook Computer are subject to change without notice. Simulated graphic shown on display. Preinstalled software may not be identical to retail versions or have all documentation.

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**Sony recommends Microsoft® Windows® XP**