

The Radiant P1550 Point-of-Sale is a member of the Radiant Systems family of open retail platforms. This 15" LCD form factor offers a 56% increase in display surface area versus 12" POS terminals. The terminal utilizes Intel's **Centrino Mobile Technology** which combines a Pentium M processor, 855 chipset, and optional PRO/Wireless card. The highly efficient Pentium M or Celeron M processor equates to greater than 2.0GHz performance in a standard Pentium 4 design, but with lower power consumption for a more reliable design. In addition, the terminal is based on Intel's EmbeddedATX standard motherboard form factor for open platforms.

#### Open Platform Highlights

- Standard Intel Architecture
- Intel's **EmbeddedATX** form factor motherboard
- Industry standard storage (hard drive or CF Card), DDR memory, PCI and PC Card (PCMCIA) expansion slots, and USB/RS232 connectivity
- Multiple operating systems including Windows XP or XP-Embedded
- OPOS drivers available

The countertop enclosure provides many benefits, including a small footprint and multiple mounting options. The unique **CableLock™ System** provides for ease of installation, controlled access to connectors, concealed cable routing, and cable restraint for better reliability. This all-in-one solution provides very tight integration of core point-of-sale hardware including a touch screen, magnetic stripe reader, and much more.

This package includes a 15" active matrix, color, 1024X768 main display with a resistive or capacitive touch screen. The 15" display is a 56% increase in surface area over the 12" models which allows for faster transactions due to less toggling between application screens, more application design flexibility, and better resolution. The high-bright, quad-bulb active matrix screen provides the best possible display quality, with excellent contrast and brightness. Additionally, the P1550 provides the very best in retail multimedia, including full motion video.

The resistive touch screen provides a very durable, accurate, and fast touch interface even with a gloved hand or stylus. Alternatively, the capacitive touch screen offers a highly durable, accurate, and fast touch interface for applications that do not require gloved or stylus input.

The P1550 also has **more powered serial ports** than most alternative POS terminals including eight RS232, four USB, and two dedicated cash drawer ports. This provides expansion capabilities if new devices/peripherals need to be supported without having to buy an add-on expander. Also, the powered serial ports eliminate the need for power bricks, thereby reducing another point of potential failure.

The **retail hardened design** of the P1550 offers dual backup thermal protection for extreme conditions of high outside temperatures or demanding CPU applications. The protection includes Intel's thermal safeguards and an isolated heat pipe cooling solution with fan activation only in severe conditions. Under typical POS applications, the P1550 will be passively cooled which is critical in demanding retail environments. Eliminating the continuously active fan increases reliability by preventing forced air through the unit, thereby reducing contaminants in the system. In addition, isolating the cooling keeps the airflow external to the electronics board.

The P1550 supports **multiple operating systems** including Windows XP Professional and XP Embedded. The P1550 provides full support for TCP/IP networking on a 10BaseT or 100 BaseT Ethernet network and it has full support for a wireless network (optional). Upgradeability and expandability are fundamental to the P1550 and it offers a field replaceable MSR and power supply, upgradeable RAM and storage, and expansion through the low-profile PCI and PC Card slot. High performance, high connectivity, and openness are the key benefits of the P1550.

**Product Stability**

By using Intel's embedded processor family, the P1550 offers **guaranteed product stability** for many years unlike traditional consumer desktop and mobile PCs that have short processor life spans of only a few months. This benefit provides a consistent configuration which is critical for rollouts that might last several years.

**Model P1550 Every-Unit-Item Features and Benefits**

Features	Benefits
Intel Pentium M or Celeron M 1.3 GHz processor (or higher)	Fast performance, low power, and support for multiple operating systems. Long lifecycle commitment from Intel.
Intel 855GME Chipset	Supports dual, independent video displays and USB 2.0. Up to 32MB dynamic video memory allocation.
Radiant countertop enclosure	Fully integrated, low-profile, water and tamper resistant housing for high functional retail interaction
CableLock™ System	Highly functional cable restraint system that uses a cable clamp to secure cable connections for better reliability
Quad-Bulb, Active Matrix, XGA LCD primary display	Excellent brightness, contrast, and color depth. Enables the proper display of high-quality graphics to ease use and decrease training time for retail employees or to directly engage the consumer
Software-adjustable brightness and contrast control for main display	Better display characteristics for user as well as significantly increased bulb life for main display
Integrated resistive or capacitive touch screen controller	Resistive screen offers low-cost option with superb ease of use. Can be used with instruments other than fingertip, very high durability, does not "drift" over time. Capacitive screen offers greater durability for applications that do not require gloved or stylus input.
Magnetic Stripe Reader (MSR)	Integrated 3-Track MSR for credit and loyalty cards. Barcode readers optional.
3.5" Hard Drive or Compact Flash™ storage	3.5" large capacity for high reliability and greater mass storage. Compact flash for greater reliability
Integrated stereo, water proof speakers	Provides high-quality feedback for user interaction. Speakers are waterproof for the demanding retail and food service environment
Integrated motion sensor (optional)	Provides user interaction through a proximity sensor on front bezel.
System Management features	Supports ACPI, SMBIOS, DMI, SNMP, WfM, and PXE. Also supports metering, remote desktop, remote execution, BIOS update, system inventory and asset management.
8 Powered serial ports (RJ12)	Provides data I/O with any RS-232 peripheral and power, minimizing failure points
4 USB 2.0 ports	Provides data I/O with any USB peripheral. Faster data rates with USB 2.0 at 480 Mbps verses 12Mbps with USB 1.1

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2 Dedicated Cash Drawer Ports (RJ 4 Pin)	Provides two powered ports for direct drive cash drawers (12 volt)
1 DVI port	Provides port for second display (digital or analog)

### **Variable Position Tilt-Stand with power supply**

This tilt-stand provides variable tilt positions that are secured without need for pins or locking knobs. The dual-spring hinge allows for continuous, smooth rotation throughout the tilt angle (20° to 100° from vertical). The stand includes Radiant's CableLock™ System, a unique cable restraint system with cable clamp to prevent accidental disconnect or tampering. It also offers through-counter cable routing, which hides all cabling from view. With the power supply located in the base, thermal dissipation of the power supply is isolated and away from the touch head motherboard electronics, which increases reliability of the terminal.

### **Specifications**

CPU	Intel Pentium M or Celeron M 1.3 GHz (or higher)
Volatile Memory	256MB Std, 2 DIMM slots with up to 2GB DDR SDRAM supported
Networking	Auto-selecting 10Base-T/100Base-T Ethernet using TCP/IP
Primary Display	15" XGA, Active Matrix, High-bright, 400 nit, Quad-bulb, supports auto-stretching VGA and SVGA resolutions
Speaker	Integrated 2 watt X 2 speakers for stereo sound
Touch Screen	Native support for 5-wire resistive or capacitive
MPEG Video Decoding	Software MPEG decoding supported
Enclosure	Polycarbonate/ABS impact resistant, high strength blend, environmentally sealed
Dimensions (Countertop envelope through tilt angle)	13.4 to 14.2" L x 15.8 or 16.8" W x 11.5 to 14.2" H, 34.0 to 36.0 cm L x 40.1 or 42.6 cm W x 29.2 to 36.0 cm H
Base Dimension	11.9" L x 10.7" W 30.2 cm L x 27.1 W
Tilt Angle	20° to 100° from vertical
Weight	22.7 lbs., 10.3 kg
Operating Temperature	32°F – 113°F, 0°C – 45°C
Storage Temperature	32°F – 158°F, 0°C – 70°C
Humidity	5% to 85%, non-condensing
EMI Certifications	FCC Class A, CE, C-Tick
Safety Certifications	UL, CUL, CB Scheme

### **Installation Notes**

**Cable Restraint:** The P1550 includes a unique **CableLock™ System** with cable clamp to prevent accidental disconnects and tampering. The clamp is opened, peripheral connections are made, the clamp is closed, and then cables are then routed through the slot in the base.

**Footprint:** An area of no less than 16.8" inches square is necessary to properly install a P1550 unit with MSR. This will accommodate the unit as well as its associated mounting hardware and customer display.

**Power:** P1550 has an auto-sensing power supply rated for 110V and 240V, 50Hz or 60Hz located in the base. Source power is drawn from a regular AC wall outlet. The electronics are "universal" – that is, they will function when connected to standard wall outlets of most nationalities around the world. For

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use in locales other than North America, special wall outlet adapters or cables will be required. For international configurations of the P1550, typically the country specific power cord is ordered separately.

**Moisture:** The P1550 is water-resistant. It can easily withstand water over spray and exposure to mild cleaning agents without sustaining damage. The P1550 should not be sprayed directly, however, as the force of pressurized water could potentially compromise the seals around the touch screen, and/or invade the enclosure through the cooling vents. Accordingly, P1550 units should not be installed in areas where they might be exposed to direct water spray. P1550 units are not meant for outdoor installation.

**Touch Screen Cleaning:** Any standard glass cleaner can be used to clean the touchscreen. Always spray the glass cleaner on the cloth or towel and then clean the touchscreen to prevent cleaner from running down the glass and gathering on the front bezel.