

ORACLE®

RETAIL

ORACLE MICROS WORKSTATION 6 FAMILY

Product Overview

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INTRODUCTION

With the introduction of the Oracle MICROS Workstation 6 Family, Oracle offers a group of sleek devices that provide outstanding performance for point-of-service (POS) transactions, delivering an advanced consumer experience.

The all-new Oracle MICROS Workstation 6 Family expands Oracle's integrated portfolio of store devices, introducing a new category that serves as a focal point in driving improved consumer engagement. These solutions have been designed as an aggregation point to conveniently deliver digital content to both store associates and customers, while boasting superior overall POS performance.

The Oracle MICROS Workstation 6 Family is designed for the unique challenges of the retail industry, providing maximum reliability with no moving parts, and utilizing the latest ultra-low power components to be more environmentally and economically responsible. Featuring a 15.6-inch widescreen, full high-definition display with a projected capacitive touch screen, the Workstation 6 Family is available in three different configurations: built with an Intel Atom processor, a Celeron processor, or a Core i5 processor.

Engineered specifically for "built for purpose" operation, the Oracle MICROS Workstation 6 Family provides a clean, secure, and integrated device hardened to withstand the day-to-day use common in POS environments.

Oracle MICROS Workstations 6 modernize consumer interactions by providing store associates with new features, transforming the POS encounter into a truly differentiated check out experience.

PRODUCT OVERVIEW

Oracle MICROS Workstation 6 delivers on the set of requirements that provide maximum benefit to retailers. These include: the simplest installation, the highest levels of maintenance-free reliability, the longest lifecycle, the most attractive design, and the added capability to adapt to changing operational requirements.

INSTALLATION

Oracle MICROS Workstations 6 is designed to simplify the installation process. A unique hook and pin mechanism enables the workstation head unit to slide easily onto the adjustable stand and automatically lock securely in place. An equally unique power connection is quick and intuitive and will not interfere with I/O (input/output) port access or cable routing.

The primary I/O panel is located along the lower rear edge of the workstation head unit, allowing for a clear, unobstructed view of the color-coded ports, where cables are easily routed, secured, and hidden beneath the I/O panel cover and the adjustable stand cable cover. The I/O panel cover slides on the workstation head unit and clicks securely in place. The adjustable stand cable cover hinges forward to ease cable management; it can also be removed completely to further simplify cable routing. Both covers can be locked in place with a security screw, further restricting access. Additional security screws are located below the adjustable stand cable cover-ready for use when needed.

RELIABILITY

Oracle MICROS Workstations 6 continues the Oracle tradition of long-lasting, trouble-free operations by meeting high standards for reliability and lifecycle.

The passively cooled Oracle MICROS Workstation 6 design is time tested, spill resistant and operates across a wide range of temperatures. The processor is thermally bonded to the cast aluminum rear cover, which in turn dissipates the system's heat, enabling the unit to run cool without the need for venting or cooling fans.

Oracle MICROS Workstations 6 is also equipped with the latest SSD technology, which enhances performance and extends system life by eliminating mechanical wear.

The power supply is internal to the Oracle MICROS Workstation 6 adjustable stand, ensuring it is always correctly placed and not subject to the abuse and spills that plague external units. Peripheral cables are securely held in place, immune to splash damage, debris, or tampering. The promise of years of reliable service is great, but a system must also maintain its attractiveness to convey

brand respectability to customers. To make sure the Oracle MICROS Workstations 6 retains good looks, it is constructed of aluminum alloy, PC-ABS, and PC-GF which provide a robust casework that can withstand years of punishing use and still maintain an appealing finish, as shown in Figure 1.

Oracle's experience with thousands of real-life hospitality and retail environments surpasses all of the competition's, and the Oracle MICROS Workstation 6 embodies this experience.

COMPLEMENTARY STYLING

The sleek styling of the Oracle MICROS Workstation 6 Family complements any décor-its low profile and small footprint easily blends into countertops or check out stations.

Special care was taken to ensure that Oracle MICROS Workstation 6 adjustable stand provides a stable base, is easy to install, and reduces the overall footprint of the device.



Figure 1. Oracle MICROS Workstation 6 has an attractive finish that can also withstand the punishing retail environment.



Figure 2. The Oracle MICROS Workstation 6 supports a wide variety of peripherals. Model 620/650 I/O panel shown.

A concealed location in the base of the stand is provided to house a local printer power supply, and an internal cable provides AC power to it. This feature ensures the printer power supply is physically protected, reduces the unit's footprint, and eliminates an additional power cord, making installations neater and easier to service.

ADAPTABILITY

The flexibility of Oracle MICROS Workstation 6 is greatly enhanced by their modular design and available options.

Wireless Options

Oracle MICROS Workstation 6 supports an optional 802.11 a/b/g/n plus Bluetooth 4.0 wireless card, enabling connection to wireless networks featuring the latest standards. The wireless card is easily installed by removing the upper cover of the workstation's head unit.

Peripheral Support

The Oracle MICROS Workstation 6 supports a wide variety of peripherals, as shown in Figure 2. To ensure it will accommodate the range of devices found in typical installations, the I/O panel features:

- ▶ Two of Oracle's MICROS Series 2 cash drawer ports
- ▶ 10/100/1000BaseT network port
- ▶ One 24V Powered USB port (Model 620 and 650 only)
- ▶ Two USB 3.0 ports

- ▶ Two USB 2.0 ports
- ▶ Multiple Serial ports, with powered serial and RS232/RS422 capabilities
- ▶ One customer display
- ▶ One USB (12V) header
- ▶ An HDMI display output
- ▶ A headphone/microphone port
- ▶ A 12V auxiliary output

Powered USB Expansion Module

In addition to the standard powered USB ports, an expansion module is available to provide an additional 24V powered USB port, three 12V powered USB ports, and two standard USB 3.0 ports. The Workstation 6 adjustable stand is designed to accommodate this optional expansion module.

Customer Displays

The 240 x 64 customer display has been designed to match the look of the Oracle MICROS Workstation 6. The integrated customer-facing display mounts directly onto the adjustable stand and has a fixed angle, as shown in Figure 3. The display connects to the customer display port at the I/O panel.

Alternatively the customer display port can be used for an external 240 x 64 pole display.



Figure 3. Oracle MICROS Workstation 6 integrated customer display mounts directly to the adjustable stand and has a fixed angle.



Figure 4. The pole display matches the styling of Oracle MICROS Workstation 6.

The pole display also matches the styling of Oracle MICROS Workstation 6, as shown in Figure 4. The oval base of the pole features a screw-hole pattern that aligns with the mounting locations on Oracle MICROS cash drawers. The pole display comes with a 3-foot cable and connects to the I/O panel of the workstation's head unit.

Oracle also offers an LCD pole display Y cable, allowing two LCD pole displays to be connected to the Oracle MICROS Workstation 6 simultaneously. This cable is useful in locations where customers can approach the cashier station from either side.

Additional configurations will be offered in the future, including options for a larger customer-facing display.

Mounting

The Oracle MICROS Workstation 6 head unit features industry standard Video Electronics Standards Association (VESA) 100 mounting capability, enabling it to be used with an Oracle wall mount bracket, third-party wall or pole mounts, as well as any other stand that meets the VESA 100 standard. An external power supply is required for use without the adjustable stand, and is sold separately.

Audio Support

The Oracle MICROS Workstation 6 features two standard stereo speakers. A connection for a headset, including a microphone input, can be found on the I/O panel.

TECHNOLOGY

To meet our customer requirements, Oracle carefully selected each component of this new workstation. Special emphasis was placed on selecting components that are reliable, efficient, and available for many years to come. Oracle MICROS Workstation 6 is designed around embedded and industrial components; only those items that are identified by their manufacturer for long lifecycle, superior specification, and tightly controlled quality.

PROCESSOR

The Oracle MICROS Workstation 6 Family offers the latest Intel Atom, Celeron, and Core i5 ULT family of CPUs. Specific models were selected to achieve the perfect balance of high performance and low thermal output. This balance enables the Oracle MICROS Workstation 6 to run the most demanding applications, yet remain passively cooled. As a result, the workstation is highly energy efficient ensuring low energy costs.

TRUSTED PLATFORM MODULE

The Oracle MICROS Workstation 6 integrates and enables Intel's Platform Trust Technology Generation 2, which provides TPM (Trusted Platform Module) 2.0 support, allowing for higher levels of system security to be enabled. TPM stores cryptographic information, such as encryption keys. It is used in conjunction with programs such as Windows BitLocker Drive Encryption. BitLocker encrypts all data stored in the Windows operating system (OS) volume, helping to ensure that data is secure and that unattended systems are not tampered with. (Models with TPM disabled are available for countries that restrict the use of TPM modules.)

ENCRYPTION-READY MAGNETIC CARD READER

The integrated MCR (magnetic card reader) shown in figure 5 provides for both user authentication and login, in addition to magnetic card entry (e.g. loyalty cards). Select Oracle MICROS Workstation 6 models feature a three-track head with excellent wear characteristics, allowing for more than 2 million reads. The head is also capable of providing bank card encryption at the swipe.

The MCR encryption supports both Advanced Encryption Standard and Triple Data Encryption Standard algorithms with a Derived Unique Key per transaction key rotation algorithm. These techniques are industry standards to ensure secure encryption and key management.

EXPANSION PORT

The Oracle MICROS Workstation 6 features a unique port behind the upper rear cover. This port provides connectivity to the system through a number of industry standards, including serial Universal Asynchronous Receiver/Transmitter (UART), Secure Digital Input Output (SDIO), USB, and Peripheral Component Interconnect Express (PCIe). A standard connector and dedicated footprint allow for future-proofing wireless modules and storage devices.



Figure 5. Models with an optional integrated MCR feature a three-track head with excellent wear characteristics and is capable of providing bank card encryption at the swipe.

OPERATING SYSTEM

The Oracle MICROS Workstation 6 Family comes preinstalled with the latest OS from Microsoft. Windows 10 IoT Enterprise is the latest in a line of OSs specifically tailored for POS use. Windows 10 IoT Enterprise features all of the benefits and capabilities of Microsoft Windows 10 and adds key functionality required by the POS industry.

Windows 10 IoT Enterprise users can take advantage of the rich features of Windows 10, including multi-touch capability and the clean, modern style of the Windows 10 application user interface.

Windows 10 IoT Enterprise offers powerful security features, such as BitLocker, Trusted Boot, and lockdown support including Unified Write Filter and gesture and keyboard filters.

Microsoft also provides a 10-year product lifecycle support policy for embedded OSs, a critical requirement in the POS industry to ensure overall long lifecycles and PCI (payment card industry) compliance.

FACTORY RECOVERY

As in previous generations of MICROS hardware, the Oracle MICROS Workstation 6 has incorporated an easy-to-use recovery function, which enables a technician to quickly restore a device to its original factory settings. The Oracle MICROS Workstation 6 implements recovery via a recessed recovery button on the bottom of the unit, or through the Windows OS. After activating factory recovery, the Oracle MICROS Workstation 6 will reload its original Windows 10 IoT Enterprise OS image.

PLATFORM SOFTWARE

The Oracle MICROS Workstation 6 platform software includes not only the Windows 10 IoT Enterprise OS but several other components developed specifically for the device. These software components include:

- ▶ Hardware device drivers specific to the unique capabilities of the Oracle MICROS Workstation 6 Family
- ▶ An API driver, to enable application programs to easily access the various functions of the workstation
- ▶ JPOS (java point-of-sale) drivers that enable third-party applications to use integrated peripherals and custom ports, such as the MCR, customer display, and cash drawer ports, through the industry standard JPOS commands
- ▶ A diagnostic utility that can test functionality and validate software versions of the Oracle MICROS Workstation and that can test peripheral components, such as the MCR, cash drawers, operator display, and customer displays



PRODUCT DESCRIPTIONS

The Oracle MICROS Workstation 6 comes with the following components:

- ▶ Oracle MICROS Workstation 6
- ▶ Windows operating system
- ▶ Projected capacitive touch screen
- ▶ SATA SSD

The following optional components can be ordered additionally:

- ▶ Adjustable stand including integrated universal power supply and USB 3.0 port
- ▶ External power supply for the Oracle MICROS Workstation 6 (optional)—for use when the adjustable stand is not present
- ▶ Wireless upgrade kit (802.11 a/b/g/n) for the Oracle MICROS Workstation 6 and Windows 10 IoT Enterprise

The Oracle MICROS Workstation 6 head unit does not come with a power supply. It must be connected to the adjustable stand, or the external power supply must be used. Also, the RJ45 to DB9 serial dongles must be purchased separately.

CUSTOMER DISPLAYS

The pole display comes with a 3-foot cable and connects to the I/O panel of the head unit. The Y cable allows two LCD pole displays to be connected to the Oracle MICROS Workstation 6 simultaneously. Customer display options include:

- ▶ Rear customer display (240 x 64) for the Oracle MICROS Workstation 6; mounts to adjustable stand
- ▶ Pole display (240 x 64), 18" pole
- ▶ Y cable for 240 x 64 pole display

CASH DRAWERS

- ▶ Cash drawer, MICROS Series 2 cash drawer connector – APG series 4000
- ▶ Cash drawer, MICROS Series 2 cash drawer connector – APG and Anker Flip Top Cash Cassettes

Conversion cables to connect to standard cash drawer ports are needed.

LAN CABLES

Ethernet patch cables are available from Oracle. If customers do not provide their own Ethernet cables, one must be ordered for each workstation. LAN cable options include:

- ▶ LAN patch cable, blue, 3'
- ▶ LAN patch cable, blue, 6'
- ▶ LAN patch cable, blue, 15'

SERIAL PORT ADAPTER CABLES

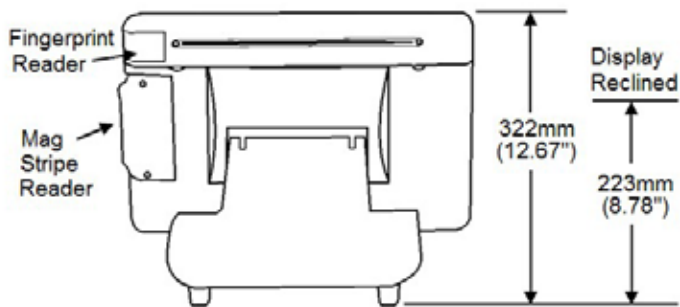
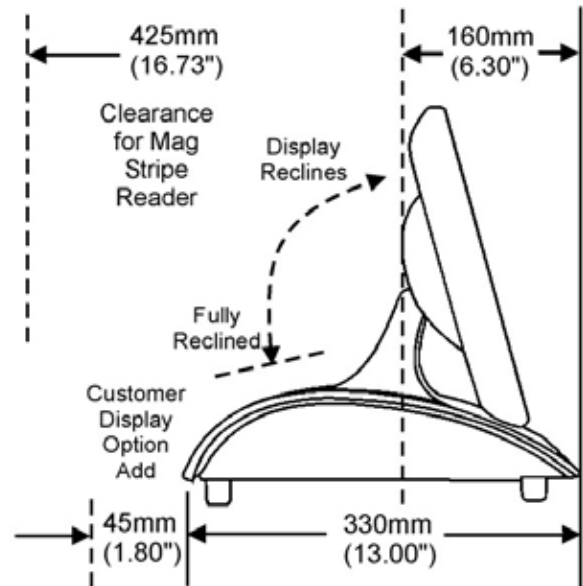
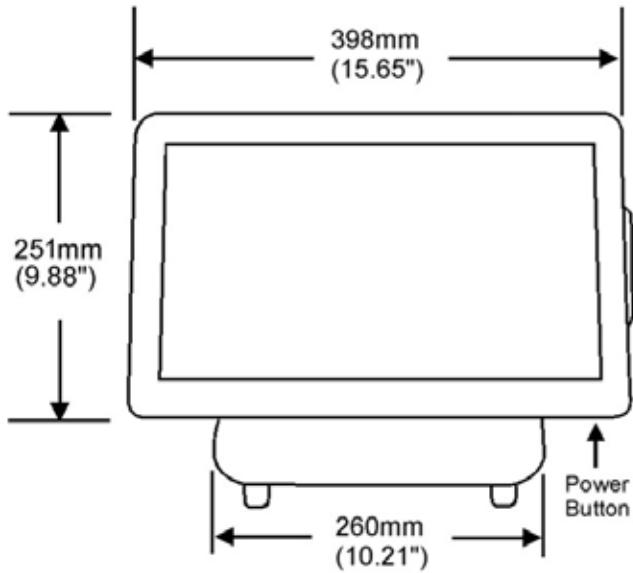
The serial port conversion dongle converts an RJ45 serial port connection to an RS232 DB9 serial connection. These serial port conversion dongles are required to connect any device with a DB9 cable to the Oracle MICROS Workstation 6. Conversion dongle options include:

- ▶ Dongle (RJ45-DB9), IDN port to RS232 two-wire serial
- ▶ Serial port conversion dongle: RJ45 to DB9
- ▶ Cable assy powered RS232 with handshaking, RJ45 to DB9

FOR MORE INFORMATION

For more information about the Oracle MICROS Workstation 6 Family, contact your Oracle sales representative, or send an email to OneRetailVoice_ww@oracle.com

APPENDIX A: DIMENSIONS



APPENDIX B: FEATURE SUMMARY

Specification/Feature	Oracle MICROS Workstation 6 Family
Processor options	Oracle MICROS Workstation 650: Intel Core i5 ULT dual-core processor Oracle MICROS Workstation 620: Intel Celeron ULT dual-core processor Oracle MICROS Workstation 610: Intel Atom processor
Memory options	Oracle MICROS Workstation 650: 8G DDR3L standard Oracle MICROS Workstation 620: 4G or 8G DDR3L standard Oracle MICROS Workstation 610: 4G DDR3L standard
Storage options	Oracle MICROS Workstation 650: 256 GB M.2 SATA III Solid State Drive Oracle MICROS Workstation 620: 128 GB M.2 SATA III Solid State Drive Oracle MICROS Workstation 610: 64 GB MO-297 SATA III Solid State Drive
Operating system options	Oracle MICROS Workstation 610, 620, and 650: Microsoft Windows 10 IoT Enterprise Oracle MICROS Workstation 610: Microsoft Windows Embedded 8.1 Industry Pro
Display and touchscreen	15.6" wide-screen full high-definition (1920 x 1080) display Multi-touch (10) projected capacitive touch screen HDMI connector for second display output
Magnetic card reader	Modular, optional integrated three-track MCR; capable of hardware encryption at the swipe
Audio	Intel HD audio Two integrated stereo speakers standard Headphone output and microphone input on I/O panel
Network	10/100/1G RJ45 Ethernet 802.11 a/b/g/n dual band radio with Bluetooth 4.0 optional
USB	9 ports on models 650 & 620, 8 ports on model 610, 1 standard in adjustable stand ▶ 1 24V powered USB port on I/O panel (model 650 & 620 only) ▶ 2 USB 3.0 ports on I/O panel ▶ 2 USB 2.0 ports on I/O panel ▶ 1 USB 2.0 port, 12V powered header on I/O panel ▶ 3 USB 2.0 ports, internal for options ▶ 1 USB 3.0 port in adjustable stand
Serial ports	3 standard on models 650 & 620, 2 on model 610 ▶ 1 RJ45 RS232 powered (5/9/12V selectable) ▶ 1 RJ45 RS232 ▶ 1 RJ45 RS422/RS232 "IDN"
Cash drawer ports	Two MICROS Series 2 cash drawer ports 12/24V selectable
Customer display port	One customer display port
Power output	One 12V Power Out (2.5A)
Expansion ports	One mini PCIe port One connectivity port
Power supply	Universal input, auto-switching power supply in the adjustable stand External universal input, auto-switching power supply for wall or VESA mount
Dimensions and weight	(See Appendix A for dimensions.) Head unit – 6 lb., adjustable stand – 5 lb.
Operating temperature range	0°C (32°F) to 50°C (122°F)
Enclosure	Cast aluminum, PC-ABS and PC-GF Spill-resistant enclosure Passive cooling (no fans)

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