Dell OptiPlex 990

Setup And Features Information

About Warnings

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

Mini Tower — Front And Back View

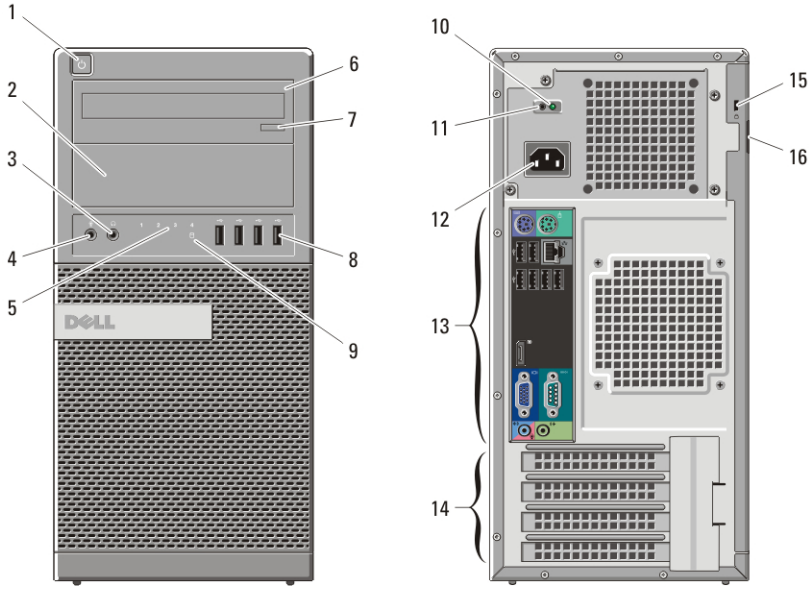

Figure 1. Front And Back View Of Mini Tower

1. power button, power light
2. optical-drive bay (optional)
3. headphone connector
4. microphone connector
5. diagnostic lights (4)
6. optical drive (optional)
7. optical-drive eject button
8. USB 2.0 connectors (4)
9. drive activity light
10. power supply diagnostic light
11. power supply diagnostic button
12. power connector
13. back panel connectors
14. expansion-card slots (4)
15. security-cable slot
16. padlock ring

030HNCA00

Regulatory Model: D09M, D05D, D03S, D01U
Regulatory Type: D09M001, D05D001, D03S001, D01U002
January 2011

Desktop — Front And Back View

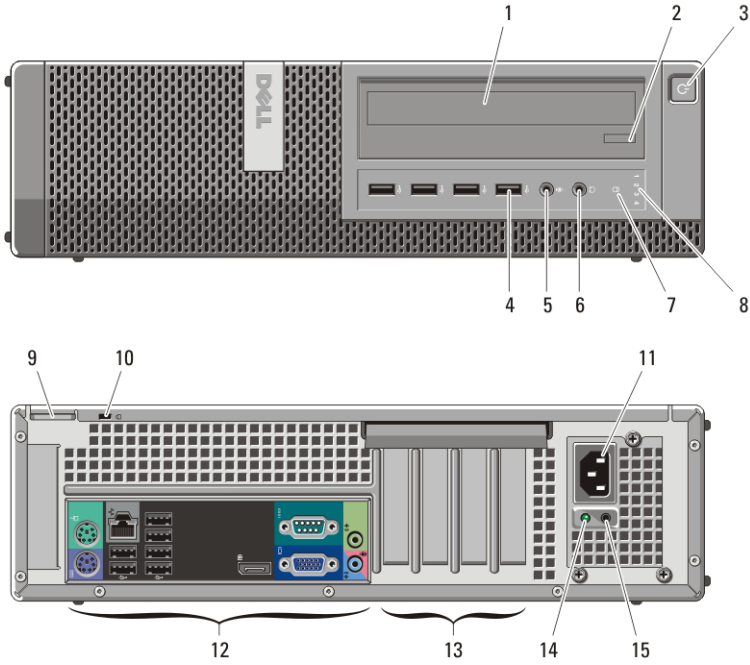

Figure 2. Front And Back View Of Desktop

1. optical drive
2. optical-drive eject button
3. power button, power light
4. USB 2.0 connectors (4)
5. microphone connector
6. headphone connector
7. drive activity light
8. diagnostic lights (4)
9. padlock ring
10. security-cable slot
11. power connector
12. back panel connectors
13. expansion-card slots (4)
14. power supply diagnostic light
15. power supply diagnostic button

Small Form Factor — Front And Back View

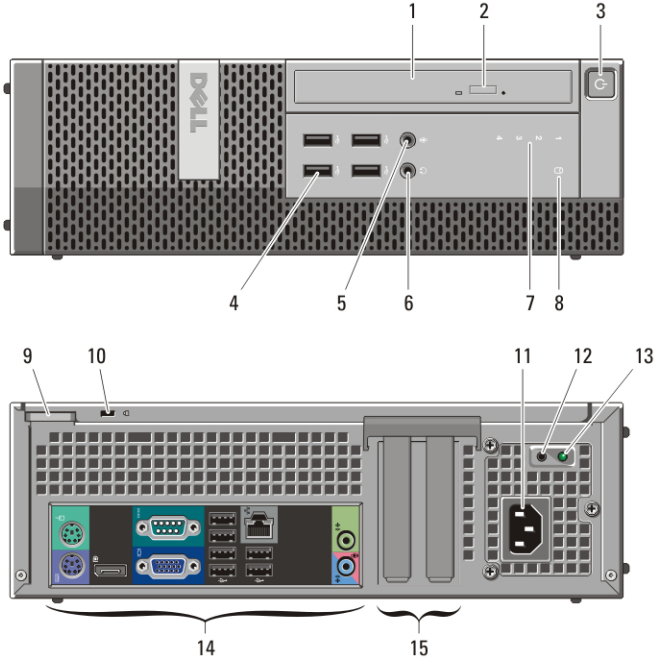

Figure 3. Front And Back View Of Small Form Factor

1. optical drive
2. optical-drive eject button
3. power button, power light
4. USB 2.0 connectors (4)
5. microphone connector
6. headphone connector
7. diagnostic lights (4)
8. drive activity light
9. padlock ring
10. security-cable slot
11. power connector
12. power supply diagnostic button
13. power supply diagnostic light
14. back panel connectors
15. expansion-card slots (2)

Ultra Small Form Factor — Front And Back View

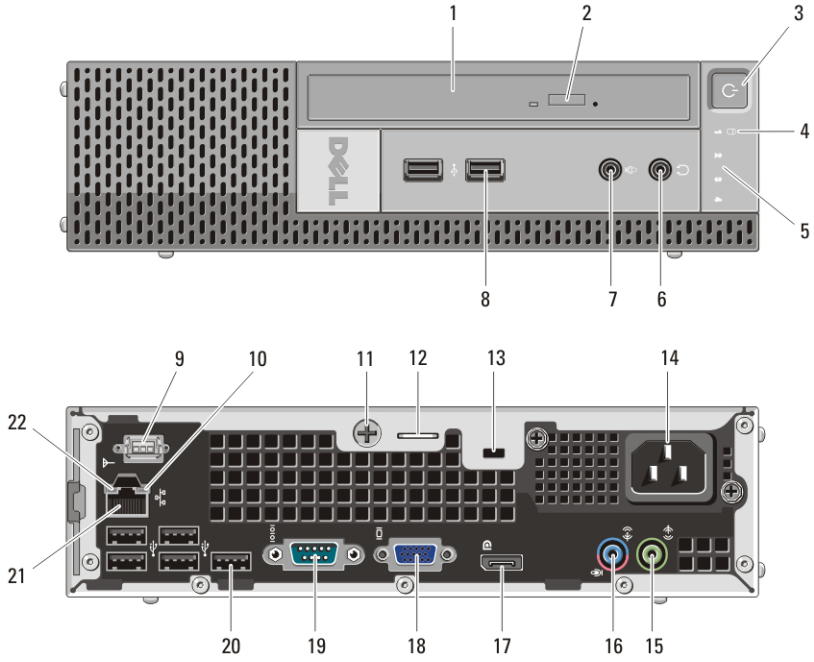

Figure 4. Front And Back View Of Ultra Small Form Factor

1. optical drive
2. optical-drive eject button
3. power button, power light
4. drive activity light
5. diagnostic lights (4)
6. headphone connector
7. microphone connector
8. USB 2.0 connectors (2)
9. Wi-Fi antenna (optional)
10. network activity light
11. captive thumbscrew
12. padlock ring
13. security-cable slot
14. power connector
15. line-out connector
16. line-in/microphone connector
17. DisplayPort connector
18. VGA connector
19. serial connector
20. USB 2.0 connectors (5)
21. network connector
22. link integrity light

Mini Tower And Desktop — Back Panel

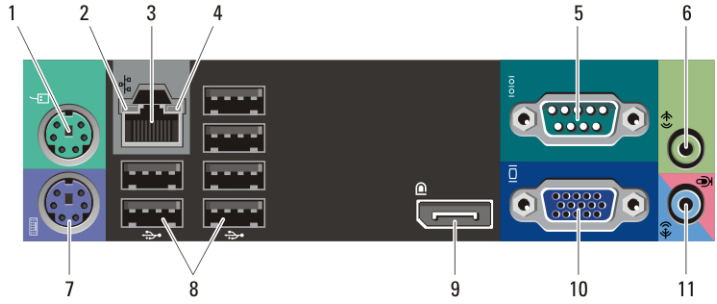

Figure 5. Back Panel View of Mini Tower And Desktop

1. mouse connector
2. link integrity light
3. network connector
4. network activity light
5. serial connector
6. line-out connector
7. keyboard connector
8. USB 2.0 connectors (6)
9. DisplayPort connector
10. VGA connector
11. line-in/microphone connector

Small Form Factor — Back Panel

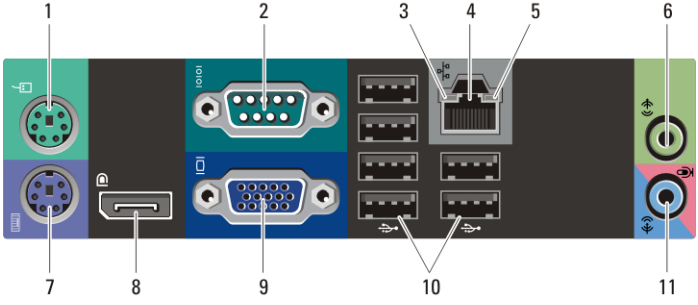

Figure 6. Back Panel View Of Small Form Factor

1. mouse connector
2. serial connector
3. link integrity light
4. network connector
5. network activity light
6. line-out connector
7. keyboard connector
8. DisplayPort connector
9. VGA connector
10. USB 2.0 connectors (6)
11. line-in/microphone connector

Quick Setup

WARNING: Before you begin any of the procedures in this section, read the safety information that shipped with your computer. For additional best practices information, see www.dell.com/regulatory_compliance.

NOTE: Some devices may not be included if you did not order them.

1. Connect the monitor using only one of the following cables:

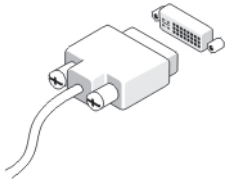

Figure 7. DVI Cable

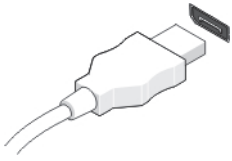

Figure 8. DisplayPort Cable

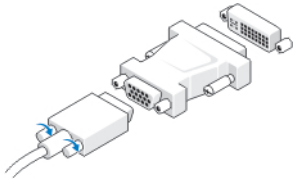

Figure 9. VGA To DVI Adapter

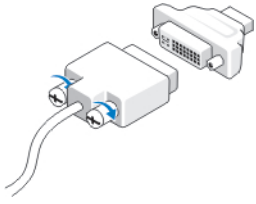

Figure 10. DVI To DisplayPort Adapter

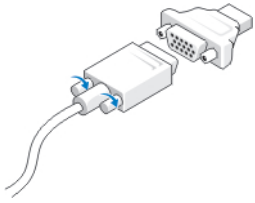

Figure 11. VGA To DisplayPort Adapter

2. Connect the USB keyboard or mouse (optional).

Figure 12. USB Connection

3. Connect the network cable (optional).

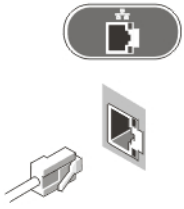

Figure 13. Network Connection

4. Connect the modem (optional).

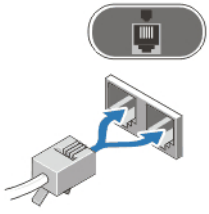

Figure 14. Modem Connection

5. Connect the power cable(s).

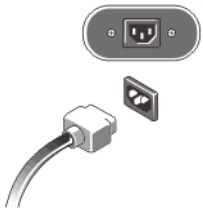

Figure 15. Connecting Power

6. Press the power buttons on the monitor and the computer.

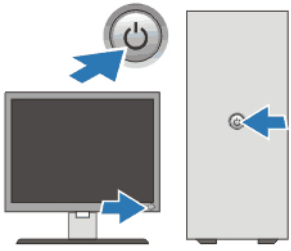

Figure 16. Turning On Power

Specifications

NOTE: The following specifications are only those required by law to ship with your computer. For a complete and current listing of the specifications for your computer, go to **support.dell.com**.

System Information	
Chipset	Intel 6 Series Express chipset
Processor	
Processor	• Intel Core i3 series • Intel Core i5 series • Intel Core i7 series
Video	
Video type:	
Integrated	• Intel HD Graphics (with Intel Celeron/Pentium-class CPU-GPU combo) • Intel HD Graphics 2000 (with Intel Core i3 DC 65 W and Intel Core i5/i7 QC vPRO 95 W-class CPU-GPU combo)

Video	
Discrete	PCI Express x 16 graphics adapter
Integrated video memory	up to 1.7 GB shared video memory (Microsoft Windows Vista and Windows 7)

Memory	
Memory module connector:	
Desktop, Mini Tower, Small Form Factor	four DIMM slots
Ultra Small Form Factor	two DIMM slots
Memory module capacity	1 GB, 2 GB, and 4 GB
Type	DDR3 with 1333 MHz
Minimum memory	1 GB
Maximum memory:	
Desktop, Mini Tower, Small Form Factor	16 GB
Ultra Small Form Factor	8 GB

Drives	
Externally accessible:	
5.25 inch drive bays	• Mini Tower — two • Desktop — one • Small Form Factor — one slim optical drive bay • Ultra Small Form Factor — one slim optical drive bay
Internally accessible:	
3.5 inch SATA drive bays	• Mini Tower — two • Desktop — one • Small Form Factor — one • Ultra Small Form Factor — none

Drives	
2.5 inch SATA drive bays	• Mini Tower — two • Desktop — one • Small Form Factor — one • Ultra Small Form Factor — one

Control Lights And Diagnostic Lights	
Front of computer	
Power button light	Blue light — Solid blue light indicates power-on state; blinking blue light indicates sleep state of the computer. Amber light — Solid amber light when the computer does not start indicates a problem with the system board or power supply. Blinking amber light indicates a problem with the system board.
Drive activity light	Blue light — Blinking blue light indicates that the computer is reading data from or writing data to the hard drive.
Diagnostic lights	Four lights located on the front panel of the computer. For more information on the diagnostic lights, see the *Service Manual* at **support.dell.com/manuals**.
Back of computer	
Power supply light	Green light — The power supply is turned on and is functional. The power cable must be connected to the power connector (at the back of the computer) and the electrical outlet. **NOTE:** You can test the health of the power system by pressing the test button. When the system power supply voltage is within specification, the self-test LED lights up. If the LED does not light up, the power supply may be defective. AC power must be connected during this test.

Power	
Coin-cell battery	3 V CR2032 lithium coin cell
Voltage	• Mini Tower — 100 VAC to 240 VAC, 50 Hz to 60 Hz, 5.0 A • Desktop — 100 VAC to 240 VAC, 50 Hz to 60 Hz, 4.4 A • Small Form Factor — 100 VAC to 240 VAC, 50 Hz to 60 Hz, 3.6 A; 100 VAC to 240 VAC, 50 Hz to 60 Hz, 4.0 A • Ultra Small Form Factor — 100 VAC to 240 VAC, 50 Hz to 60 Hz, 2.9 A
Wattage	• Mini Tower — 265 W • Desktop — 250 W • Small Form Factor — 240 W • Ultra Small Form Factor — 200 W
Maximum heat dissipation	• Mini Tower — 1390 BTU/hr • Desktop — 1312 BTU/hr • Small Form Factor — 1259 BTU/hr • Ultra Small Form Factor — 758 BTU/hr

NOTE: Heat dissipation is calculated by using the power supply wattage rating.

NOTE: The voltage selector switch is available only on non-EPA power supplies.

NOTE: See the safety information that shipped with your computer for important voltage-setting information.

Physical	
Height	• Mini Tower — 36.00 cm (14.17 inches) • Desktop — 36.00 cm (14.17 inches) • Small Form Factor — 29.00 cm (11.42 inches) • Ultra Small Form Factor — 23.70 cm (9.33 inches)
Width	• Mini Tower — 17.50 cm (6.89 inches) • Desktop — 10.20 cm (4.01 inches) • Small Form Factor — 9.26 cm (3.65 inches) • Ultra Small Form Factor — 6.50 cm (2.56 inches)

Physical	
Depth	• Mini Tower — 41.70 cm (16.42 inches) • Desktop — 41.00 cm (16.14 inches) • Small Form Factor — 31.20 cm (12.28 inches) • Ultra Small Form Factor — 24.00 cm (9.45 inches)
Weight (Minimum)	• Mini Tower — 8.87 kg (19.55 lb) • Desktop — 7.56 kg (16.67 lb) • Small Form Factor — 5.70 kg (12.57 lb) • Ultra Small Form Factor — 3.27 kg (7.20 lb)

Environmental	
Temperature:	
Operating	10 °C to 35 °C (50 °F to 95 °F)
Storage	–40 °C to 65 °C (–40 °F to 149 °F)
Relative humidity	20% to 80% (noncondensing)
Altitude:	
Operating	–15.2 m to 3048 m (–50 ft to 10,000 ft)
Storage	–15.2 m to 10,668 m (–50 ft to 35,000 ft)
Airborne contaminant level	G2 or lower as defined by ISA S71.04–1985

Finding More Information and Resources

See the safety and regulatory documents that shipped with your computer and the regulatory compliance website at **www.dell.com/regulatory_compliance** for more information on:

- Safety best practices
- Regulatory certification
- Ergonomics

See **www.dell.com** for additional information on:

- Warranty
- Terms and Conditions (U.S. only)
- End User License Agreement

Information in this publication is subject to change without notice.

© 2010 Dell Inc. All rights reserved.

Reproduction of these materials in any manner whatsoever without the written permission of Dell Inc. is strictly forbidden.

Trademarks used in this text: Dell™, the DELL logo, Dell Precision™, Precision ON™, ExpressCharge™, Latitude™, Latitude ON™, OptiPlex™, Vostro™, and Wi-Fi Catcher™ are trademarks of Dell Inc. Intel®, Pentium®, Xeon®, Core™, Atom™, Centrino®, and Celeron® are registered trademarks or trademarks of Intel Corporation in the U.S. and other countries. AMD® is a registered trademark and AMD Opteron™, AMD Phenom™, AMD Sempron™, AMD Athlon™, ATI Radeon™, and ATI FirePro™ are trademarks of Advanced Micro Devices, Inc. Microsoft®, Windows®, MS-DOS®, Windows Vista®, the Windows Vista start button, and Office Outlook® are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries. Blu-ray Disc™ is a trademark owned by the Blu-ray Disc Association (BDA) and licensed for use on discs and players. The Bluetooth® word mark is a registered trademark and owned by the Bluetooth® SIG, Inc. and any use of such mark by Dell Inc. is under license. Wi-Fi® is a registered trademark of Wireless Ethernet Compatibility Alliance, Inc.

Other trademarks and trade names may be used in this publication to refer to either the entities claiming the marks and names or their products, Dell Inc. disclaims any proprietary interest in trademarks and trade names other than its own.