

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

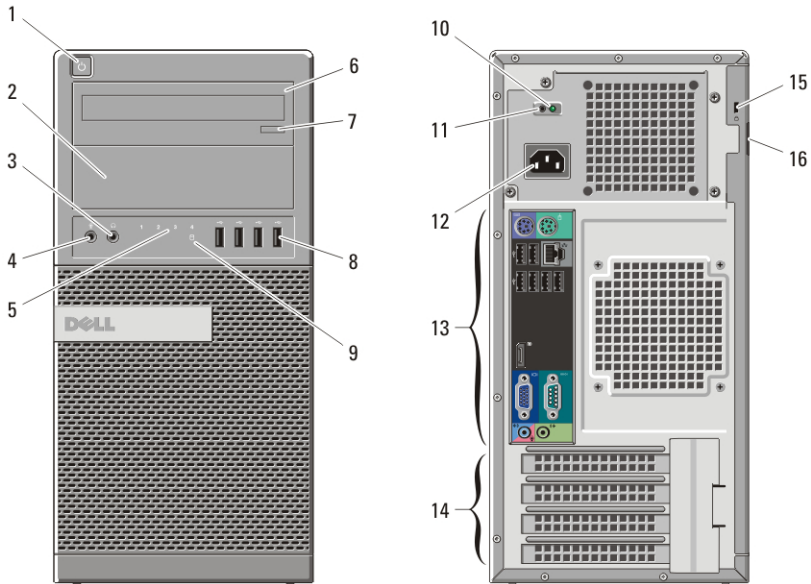


Figure 1. Front And Back View Of Mini Tower

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



030HNCA00

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

Desktop — Front And Back View

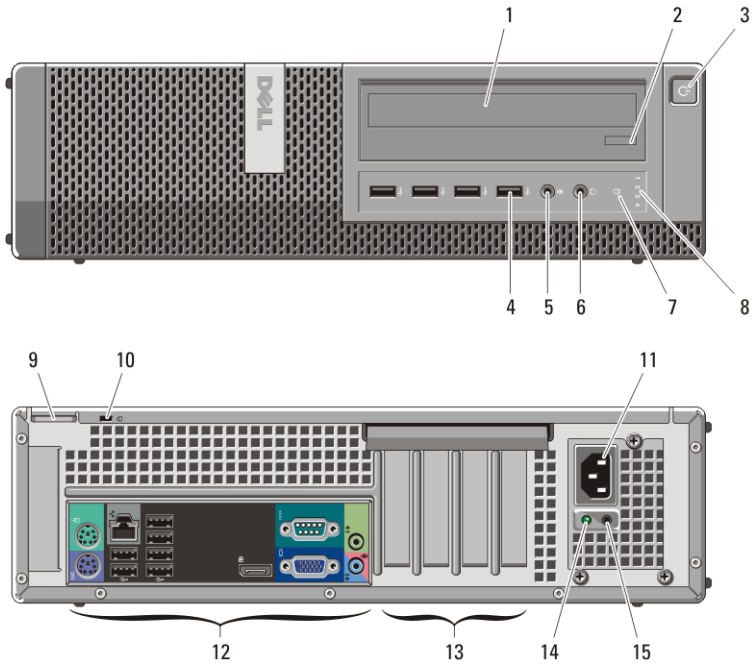


Figure 2. Front And Back View Of Desktop

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

Small Form Factor — Front And Back View

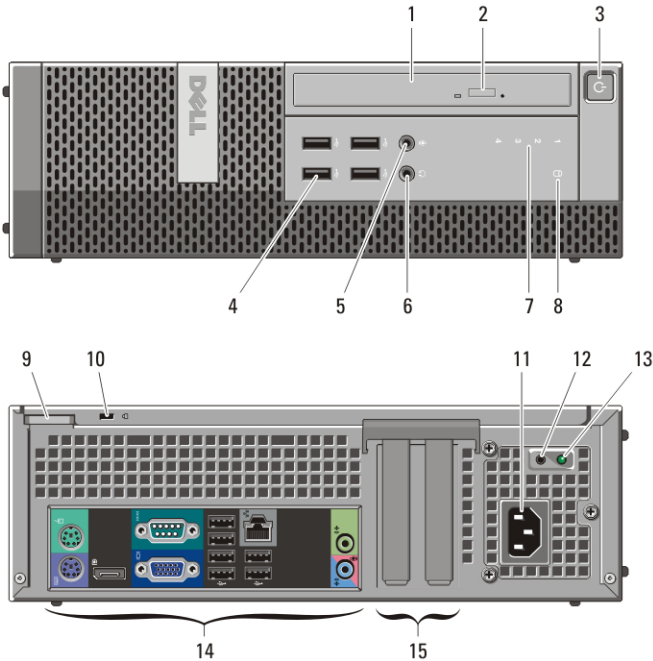


Figure 3. Front And Back View Of Small Form Factor

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

Ultra Small Form Factor — Front And Back View

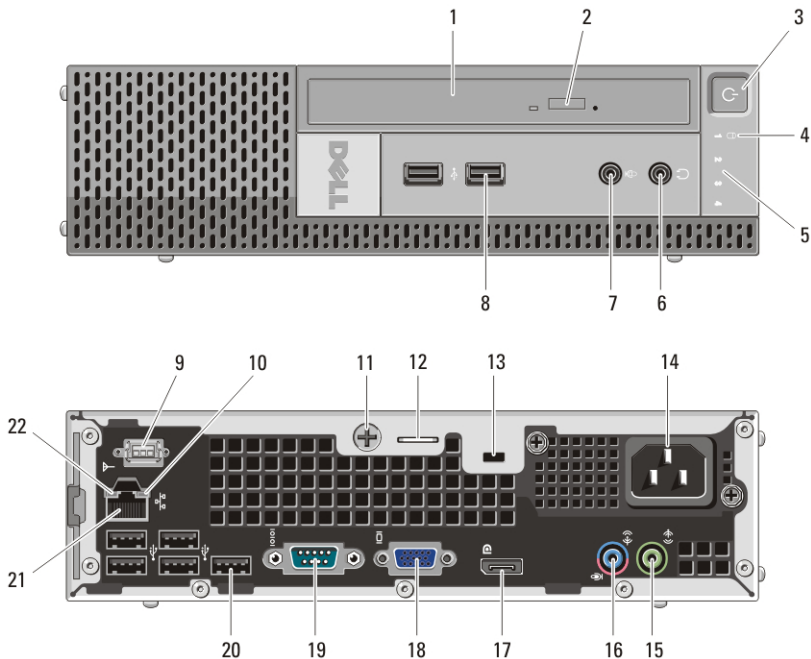


Figure 4. Front And Back View Of Ultra Small Form Factor

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

Mini Tower And Desktop — Back Panel

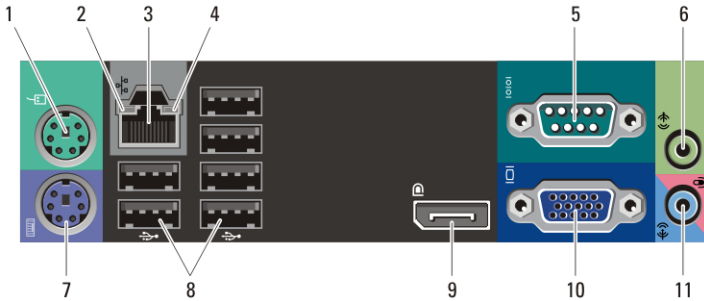


Figure 5. Back Panel View of Mini Tower And Desktop

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

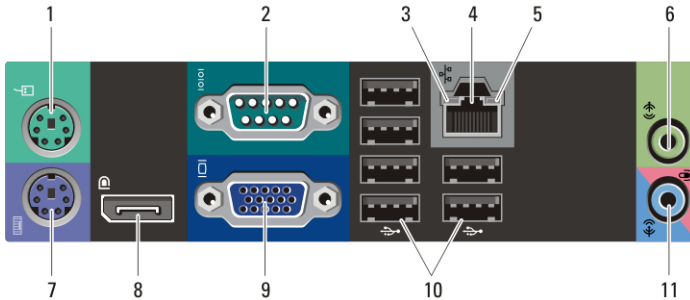




Figure 6. Back Panel View Of Small Form Factor

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:

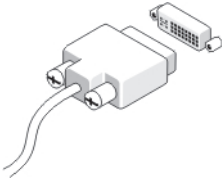


Figure 7. DVI Cable

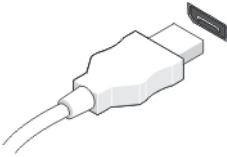


Figure 8. DisplayPort Cable

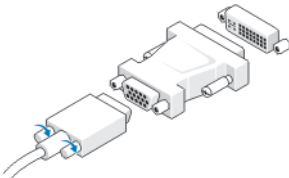


Figure 9. VGA To DVI Adapter

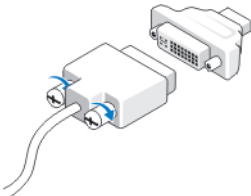


Figure 10. DVI To DisplayPort Adapter

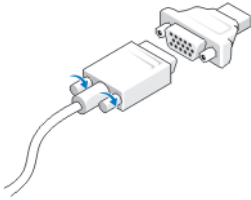


Figure 11. VGA To DisplayPort Adapter

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

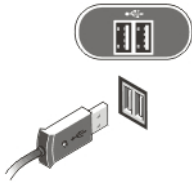


Figure 12. USB Connection

3. Connect the network cable (optional).

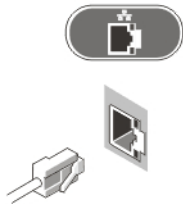


Figure 13. Network Connection

4. Connect the modem (optional).

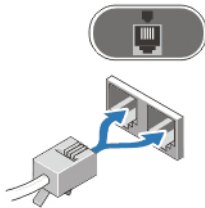


Figure 14. Modem Connection

5. Connect the power cable(s).



Figure 15. Connecting Power

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

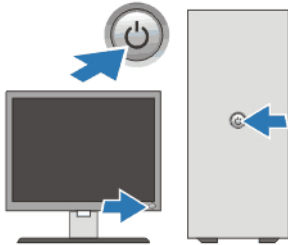


Figure 16. Turning On Power

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
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Processor

Processor	<ul style="list-style-type: none"> • Intel Core i3 series • Intel Core i5 series • Intel Core i7 series
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Video

Video type:

Integrated	<ul style="list-style-type: none"> • 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)
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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	<ul style="list-style-type: none">• Mini Tower — two• Desktop — one• Small Form Factor — one slim optical drive bay• Ultra Small Form Factor — one slim optical drive bay
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Internally accessible:

3.5 inch SATA drive bays	<ul style="list-style-type: none">• Mini Tower — two• Desktop — one• Small Form Factor — one• Ultra Small Form Factor — none
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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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Mini Tower — 265 W• Desktop — 250 W• Small Form Factor — 240 W• Ultra Small Form Factor — 200 W
Maximum heat dissipation	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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)	<ul style="list-style-type: none">• 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

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