

Dell 7242920000

Dell 180W Power Supply Unit Instruction Manual

Model: 7242920000

1. INTRODUCTION

This manual provides essential information for the safe and proper installation, operation, and maintenance of your Dell 180 Watt Power Supply Unit (PSU). This specific model, 1TG7T, is designed for use with Dell Optiplex 3050, 5050, and 7050 SFF (Small Form Factor) systems. Please read this manual thoroughly before attempting any installation or service.

2. SAFETY INFORMATION

Always observe the following safety precautions to prevent injury or damage to the equipment:

- **Electrical Hazard:** Power supplies contain high voltage components. Do not open the PSU casing. Servicing should only be performed by qualified personnel.
- **Disconnect Power:** Always disconnect the computer from the main power outlet before installing, removing, or servicing the power supply.
- **Static Electricity:** Use an anti-static wrist strap or take other anti-static precautions when handling the PSU to prevent damage to sensitive electronic components.
- **Ventilation:** Ensure proper airflow around the PSU and within the computer case to prevent overheating. Do not block ventilation openings.
- **Compatibility:** Use only power supplies compatible with your system's specifications. Incompatible PSUs can cause damage.

3. PRODUCT OVERVIEW



Image: Dell 180W Power Supply Unit (Model: 1TG7T). This image displays the external casing of the power supply, showing the AC power input connector, ventilation grilles, and the bundle of output cables. The Dell branding and regulatory labels are visible on the side.

The Dell 180W Power Supply Unit (part numbers 1TG7T, 66P44, C5YYV, TDFTP, 082DRM) is an internal component designed to convert AC power from a wall outlet into DC power required by the computer's components. It features a compact design suitable for Small Form Factor (SFF) desktop computers.

4. SETUP AND INSTALLATION

Installation of an internal power supply requires technical knowledge and should ideally be performed by a certified technician. If you proceed with self-installation, follow these general steps:

1. Prepare the System:

- Shut down the computer completely and disconnect the power cord from the wall outlet.
- Disconnect all peripheral devices (monitor, keyboard, mouse, etc.).
- Open the computer case according to your system's service manual.

2. Remove Old PSU (if applicable):

- Carefully disconnect all power cables from the motherboard, graphics card, hard drives, and other components.
- Unscrew the old PSU from the computer chassis.
- Gently slide the old PSU out of the case.

3. Install New PSU:

- Slide the new Dell 180W PSU into the designated bay in the computer chassis.
- Secure the PSU with the appropriate screws.

- Connect the main 24-pin ATX power connector to the motherboard.
- Connect the 4-pin or 8-pin CPU power connector to the motherboard.
- Connect SATA power cables to hard drives and SSDs.
- Connect any other necessary power cables (e.g., PCIe for graphics cards, if applicable, though this PSU is 180W and likely for integrated graphics systems).

4. Final Steps:

- Ensure all cables are securely connected and routed to avoid obstructing airflow.
- Close the computer case.
- Reconnect the power cord and peripheral devices.
- Power on the system to verify functionality.

Refer to your specific Dell Optiplex system's service manual for detailed, model-specific installation instructions.

5. OPERATING PRINCIPLES

The Dell 180W PSU operates automatically once installed and connected to a power source. It continuously supplies stable DC voltage to all connected computer components. The PSU is designed to regulate voltage and protect against overcurrent, overvoltage, and short circuits, ensuring the safe operation of your system. Its 80 PLUS Bronze certification indicates high energy efficiency, converting a significant percentage of AC power into usable DC power, thus reducing wasted heat and electricity consumption.

6. MAINTENANCE

Minimal maintenance is required for the power supply unit itself. However, general computer maintenance practices contribute to its longevity:

- **Dust Removal:** Periodically clean the interior of your computer case, including the PSU's fan and ventilation grilles, using compressed air. Ensure the computer is powered off and unplugged before cleaning.
- **Ventilation:** Ensure the computer is placed in a well-ventilated area, away from direct sunlight or heat sources, to prevent overheating of internal components, including the PSU.
- **Cable Management:** Proper cable management inside the case improves airflow and prevents cables from interfering with the PSU fan.

7. TROUBLESHOOTING

If you experience issues with your computer's power, consider the following:

Problem	Possible Cause	Solution
Computer does not power on.	Loose power cable, faulty wall outlet, PSU failure.	Check power cable connections. Test wall outlet. If still no power, PSU may need replacement.
System randomly shuts down or reboots.	Overheating, unstable power, failing PSU.	Ensure proper ventilation. Check for dust buildup. If issues persist, PSU may be failing.
Burning smell or smoke from computer.	Component failure, including PSU.	Immediately disconnect power. Do not attempt to power on. Seek professional assistance.

Problem	Possible Cause	Solution
Loud fan noise from PSU.	Dust buildup, failing fan bearing.	Clean PSU fan. If noise persists, fan may be failing, requiring PSU replacement.

For complex issues, it is recommended to consult a qualified computer technician or Dell support.

8. SPECIFICATIONS

Feature	Detail
Brand	Dell
Model Number	7242920000 (Also known as 1TG7T, 66P44, C5YYV, TDFTP, 082DRM)
Output Wattage	180 Watts
Product Dimensions (L x W x H)	9.7 x 6.5 x 1.1 inches (24.6 x 16.5 x 2.8 cm)
Item Weight	8.32 pounds (3.77 kg)
Compatibility	Dell Optiplex 3050, 5050, 7050 SFF systems
Efficiency Rating	80 PLUS Bronze (implied by "BRZ D8 LTON" in title, common for Dell PSUs)

9. WARRANTY AND SUPPORT

For information regarding warranty coverage, technical support, or service for your Dell Power Supply Unit, please refer to the documentation provided with your original Dell system or visit the official Dell support website. Ensure you have your product's serial number or service tag readily available when contacting support.

You can typically find support resources at: www.dell.com/support