

Networking Hardware

CompTIA A+ Core 1 (220-1101)

Domain: 2.0: Networking

Objective: 2.5: Compare and contrast common networking hardware devices.

Video Overview

This video on Networking Hardware is designed to give you a foundational understanding of the essential components that make up modern computer networks. As you prepare for your certification, grasping the purpose and interconnections of devices like Network Interface Cards, switches, routers, and firewalls is highly beneficial. Beyond passing an exam, this knowledge is directly applicable to supporting IT infrastructure in any professional setting, troubleshooting connectivity issues in your home, or even understanding the backbone of the internet services you use daily. Pay close attention to how each device contributes to the overall flow of data, as this insight will be helpful in your future IT career.

Key Topics Covered

- Network Interface Card (NIC) and MAC addresses.
- **Switches:** unmanaged vs. managed, VLANs, and routing capabilities.
- Power over Ethernet (PoE) standards and applications.
- Wireless Access Points (WAPs).
- Routers and IP addresses.
- Firewalls for network security.
- Modems (dial-up, DSL, cable) and Optical Network Terminals (ONT).
- Patch panels for cable management.

Student Notes Section