

Hard Disk Drives in Depth | A Detailed Explanation of HDDs



Blog post summary:

- **Hard disk drives store data magnetically and permanently on spinning platters.**
- HDD types include **3.5-inch** and **2.5-inch** drives.
- When evaluating HDDs, consider **spindle speed, data transfer rates,** and **cache size.**
- **Perpendicular magnetic recording (PMR):** Lower data density, higher data transfer rates.
- **Shingled magnetic recording (SMR):** Higher data density, lower data transfer rates.



- **PATA:** Old interface, needs two cables for power and data.
- **SATA:** The most common interface in HDDs, also needs two cables for power and data.
- **USB:** Typically found on external HDDs.