IDE Hard Drives

The hard drives that met the requirements for that fit into a standard drive bay in a low-profil drive electronics (IDE) interface and range in c

Product

Quantum ProDrive LPS 120AT Quantum Corp. 500 McCarthy Blvd. Milpitas, CA 95035 (800) 624-5545 (408) 894-4000

Price: \$382*

Kalok KL3100 Kalok Corp. 1289 Anvilwood Ave. Sunnyvale, CA 94089 (408) 747-1315 Price: \$298*

Western Digital Caviar 2120 Western Digital Corp. 8105 Irvine Center Dr. Irvine, CA 92718 (714) 932-4900

Price: \$358*

Kalok KL3120 Kalok Corp. 1289 Anvilwood Ave. Sunnyvale, CA 94089 (408) 747-1315 Price: \$348*

Western Digital Caviar 280 Western Digital Corp. 8105 Irvine Center Dr. Irvine, CA 92718 (714) 932-4900

Price: \$272*

Quantum ProDrive LPS 105AT Quantum Corp.

500 McCarthy Blvd. Milpitas, CA 95035 (800) 624-5545

(408) 894-4000

Price: \$341*

Seagate ST3120A Seagate Technology 920 Disc Dr. Scotts Valley, CA 95066 (408) 439-2670

Price: \$322*

Maxtor 7120AT Maxtor Corp. 211 River Oaks Pkwy. San Jose, CA 95134 (800) 262-9867

Price: \$326*

Procom ProPaq 120n Procom Technology 2181 Dupont Dr. Irvine, CA 92715 (800) 800-8600

Price: \$360*

Conner CP-30084E Conner Peripherals 3081 Zanker Rd. San Jose, CA 95134 (408) 456-4500

Price: \$289*

he PC/Computing 200 are 312-inch models e desktop system. The drives use an integrated apacity from 80MB to 125MB.

Evaluation

A relatively recent offering from Quantum, the ProDrive LPS 120AT outperformed every drive we tested. The 122MB drive owes its spectacular performance in part to a whopping 256K segmented cache and a fast-spinning platter. Also, because it squeezes its entire capacity onto a single platter, its head can read a large number of sectors on the outer tracks in a single pass. Make no mistake: The LPS 120AT is the fastest 120MB IDE drive you'll find today.

Dollar for dollar, the KL3100 is an excellent buy. This 105MB drive comes with a 32K proprietary cache, which boosted its read performance especially in sequential reads of small filesto some of the fastest times we've seen. Add to that a relatively low price and 15-month warranty, and you've got a real bargain.

The 125MB Western Digital Caviar 2120 was remarkably fast in our benchmark tests, in part because of its 32K buffer. In fact, this drive was second only to the top-ranked Quantum LPS 120AT.

Like the Kalok KL3100, the 120MB Kalok KL3120 offers great performance for the money. Its 64K cache boosted transfer rates to as much as 2MB per second in some tests. Better still, you get an additional 15MB of storage in the KL3120 for only \$50 more than the KL3100.

Western Digital's Caviar series owes its legacy to speed. Remarkably fast average access and sequential read timesthe third fastest in this category and double the speeds of many drives heremake the 85MB Caviar

280 a winner.

Equipped with a 64K read-ahead cache, the Quantum ProDrive LPS 105AT's performance is average, though faster than you might expect on random and sequential reads (thanks to its relatively large cache). Its transfer rates were helped in part by a three-zone writing scheme that packs more sectors on the outer tracks.

Seagate's 107MB ST3120A has built-in diagnostics, and it comes with power-management features that provide active, idle, standby, and sleep modes for machines that need to conserve power. Impressive access times, a slim form factor, and a low price make this drive a high-value contender

The Maxtor 7120AT's intelligent 64K read-ahead cache stores up to 128 sectors of data in high-speed memory. Though this helps access times, the 7120AT is no speed demon. But the drive's low street price made it one of the best values we found.

Procom took pains to ensure that even novices would be able to install its 121.7MB ProPaq 120n: The documentation is excellent, and the drive comes packaged with cables, a mounting kit, low-level formatting utilities, and other accessories. Its performance ranking was respectable but not outstanding.

Conner's CP-30084E squeezes 85MB of data onto one platter formatted with 1,806 tracks on each surface. Fast random read times are due to the drive's 32K read-ahead cache. In overall performance it scored in the upper mid-range of drives we tested. A relatively high cost per megabyte kept it from ranking higher on this list, though at \$289 on the street, the CP-30084E makes an excellent second drive.

Score

92

90

90

86.5

86.5

75.5

75.5

71.5

71.5

70