

Conner Internal DAT Drives

DDS/DDS-DC Compatible

- DDS standard format
- 2 GB native capacity –
Up to 4 GB with data
compression
- 183 to 366 KB/second
native transfer rate
- Up to 732 MB/second transfer
rate with data compression
- SCSI and SCSI-2

True Computer Grade DAT® Peripherals

Today's high speed, connected computer environments demand dedicated removable storage peripherals which combine high capacity, absolute reliability, state-of-the-art backup performance, and low cost all in a small form factor. The Conner family of True Computer Grade Digital Audio Tape (DAT) products provide a balance of these features which is unequaled, storing up to 4 gigabytes of data on a single 4 mm cassette.

Conner internal drives are designed for use in high-speed standalone and networked PC's, file servers, work-stations, minicomputers and multi-user systems. With a field-proven 3.5-inch mechanism and the Conner DAT breakthrough double speed native transfer rate, Conner drives establish new levels of industry performance for reliable, multi-gigabyte fixed disk backup on popular DOS, NetWare, Windows, OS/2 and UNIX systems; DEC, IBM, Apple, Sun and many other platforms.



Conner Turbo Internal SCSI DAT models include drives in both 3.5- and 5.25-inch form factors

High-Speed Transfer Rate

- 183 to 366 KB/second native transfer rate (22 MB/minute) before data compression
- 732 KB/second (44 MB/minute) typical with DDS-DC data compression

Premium Capacity, Exceptional Performance

- 2 or 4 GB typical storage capacity on 90 meter DDS tape
- High speed random access: 30 seconds (average) to any file on a 90 meter tape
- Conner Turbo DAT drives write and read both DDS-DC compressed and standard DDS data
- Turbo and standard drive tapes are interchangeable.

Advanced Computer Grade Technology

- 3.5-inch DAT drive die cast aluminum mechanism Conner-designed specifically for computer applications
- Four Direct Drive (4DD) motors eliminate belts and mechanical mode changes

- Gentle tape handling allows efficient, reliable use of 90 meter tape in all drives
- Flash EEPROM enables OEM SCSI firmware upgrades via firmware cassette, SCSI bus, or drive serial port

Proven Reliability

- Field proven 3.5-inch drive mechanism
- Read-after-write, four head design; third level ECC (C3) standard
- Front bezel LEDs indicate when head cleaning or tape replacement needed
- Electronic tape path control ensures long head, drum, and key component life
- Uncorrectable error rate of less than 1 in 10^{15} bits
- Expected MTBF greater than 150,000 hours

Complete Storage Solutions From Conner

In addition to tape products, Conner offers a comprehensive line of information storage solutions, including disk drives, storage management software and storage systems, for a wide range of computer applications.

MODEL

4320NT	3.5-inch Conner DAT
4320RT	Conner DAT with 5.25-inch mounting
4324NP	3.5-inch Conner Turbo DAT
4324RP	Conner Turbo DAT with 5.25-inch mounting

CONNER DAT DRIVE – Model 4320

Capacity (90 meter tape)	2 GB
Transfer Rate	183 KB/sec native
Burst Rate	5 MB/sec
Tape Speed	0.32 inches/sec (8.15mm/sec)
Head to Tape Speed	123 inches/sec (3,124 mm/sec)
Buffer	512K

CONNER TURBO DAT DRIVE – Model 4324

	Native	Compressed
Capacity (90 meter tape)	2 GB	4 GB
Transfer Rate	366 KB/sec	732 KB/sec
Burst Rate	5 MB/sec	
Tape Speed	0.64 inches/sec (16.3mm/sec)	
Head to Tape Speed	246 inches/sec (6,248mm/sec)	
Buffer	1 MB	
EEPROM	Flash	

GENERAL SPECIFICATIONS

DRIVE PERFORMANCE

Form Factor	3.5-inch
Search/Rewind Speed	200x normal speed
Average Access Time	
90 meter tape	30 seconds
Drive Type	Computer grade, four direct drive (4DD) motors
Recording Method	Helical scan (R-DAT)
Recording Format	ANSI/ECMA DDS-DC; DCLZ (Data Compression Lempel-Ziv) Algorithm
Error Rate	Less than 1 in 10 ¹⁵ bits

SCSI CONTROLLER

Interface Format	SCSI or SCSI-2; hardware and software selectable
Transmission	Single-ended, asynchronous or synchronous

MEDIA

Recording Media	4 mm DDS DAT metal particle (DDS qualified media recommended)
Cartridge Size	2.9" x 2.1" x 0.4" (74 mm x 53 mm x 10 mm)
Tape Length	295 feet (90 meter)
Packing Density	1,869 tracks/inch (73.6 tracks/mm)
Areal Density	114 M bits/sq. inch (176,700 bits/sq.mm)

POWER REQUIREMENTS

+5VDC:	0.9 amp (typical)
+12VDC:	0.4 amp (typical)
Power Consumption	Below 9.5 watts (typical)

PHYSICAL SPECIFICATIONS

	3.5-inch	5.25-inch
Height	1.60" (41 mm)	1.60" (41 mm)
Length	6.00" (152.4 mm)	7.10" (180.3 mm)
Width	4.10" (101 mm)	5.90" (146 mm)
Weight	2.0 lbs (0.9 kg)	2.4 lbs (1.1 kg)

ENVIRONMENTAL CHARACTERISTICS

Ambient Temperature	
Operating	41° to 113°F (5° to 45°C), mechanism and media
Non-operating	-40° to 149°F (-40° to 65°C), mechanism
Relative Humidity	
Operating	20% to 80% non-condensing, mechanism and media
Non-operating	0% to 90% non-condensing, mechanism
Max Wet Bulb Temperature	78.8°F (26°C)

PRODUCT CERTIFICATIONS

UL 1950, FCC Class B; CSA C22.2, No. 950-M89; TUV EN 60 950

RELIABILITY

MTBF	150,000 hours
MTR	Less than 0.5 hours

QUALIFIED MEDIA

60 meter	Model 31300 DDS data cartridge
90 meter	Model 32000 DDS data cartridge
Cleaning Cartridge	Model 91301 DDS cleaning kit

* Capacity and transfer rate with data compression are dependent upon the characteristics of the files being compressed.

Conner does not warrant that the predicted MTBF is representative of any particular unit installed for customer use. Failure rates are derived from a large data base of test samples. The actual figures will vary from unit to unit.

CONNER

The Storage Answer

Worldwide Headquarters: 3081 Zanker Road, San Jose, CA 95134, Telephone (408) 456-4500, 1-800-4-CONNER
 Sales Offices: U.S. - Northeast Region (617) 449-9550 • Southeast Region (404) 806-3900 • Central Region (214) 789-2800 • Northwest Region (408) 456-4500 • Southwest Region (818) 597-8895
 Canada - Ontario (905) 272-3216 Europe - Aosta 39/125-800111 • London 44/628-777277 • Munich 49/89-996-5570 • Paris 33/1-47-45-92-50
 Asia - Hong Kong 85/2-560-0229 • Seoul 82/2-551-0511 • Singapore 65/296-1992 • Taipei 886/2-718-9193 • Tokyo 81/3-3485-8901 Latin America - Miami (305) 789-6685