

1.3GB THE INDUSTRY-STANDARD DAT

FEATURES

- 1.3 gigabytes of removable storage.
- 183KB per second data transfer rate.
- Standard SCSI-1 or SCSI-2 interfaces (selectable).
- Computer DAT mechanism designed for data applications requiring high duty cycle mechanical reliability.
- 5.25-inch half-high form factor.
- Industry-standard DDS[™] format with fully certified compliance.
- 4MB per second asynchronous burst transfer rate.
- 5.3MB per second synchronous burst transfer rate.
- Low-cost shirt-pocket size cassette.
- 20-second average data access time.
- Read-after-write data verification and threshold check.
- Three layers of hardware ECC.
- Remaining-tape-capacity information.

The WangDAT™ Model 1300 4mm computer DAT (Digital Audio Tape) drive is the ideal high-capacity 5.25-inch half-high removable tape storage solution. It represents a quantum leap over other technologies for hard-disk backup, archival storage and data logging.

The Model 1300 incorporates an advanced computer DAT mechanism with direct drive reel motors for precise speed control; a four-head drum with read-after-write heads, fully balanced to reduce ISV (instantaneous speed variation); direct "in-path" closed-loop tension control; and an independent capstan motor for reliable recording.

Utilizing helical scan recording technology and the DDS format developed by Hewlett-Packard® and Sony,® the Model 1300 delivers 1.3 gigabytes of removable storage in a durable shirt-pocket size 4mm data cassette. The Model 1300 offers a sustained transfer rate of nearly 11 megabytes per minute and the highest SCSI burst rate available – 5.3 megabytes per second!

WangDAT incorporates VLSI integration, a highly efficient architecture and compact implementation to achieve a fully implemented SCSI solution. And WangDAT's SCSI interface is a full implementation of SCSI-1 and SCSI-2, including all mandatory and most optional commands, including COPY!

To ensure data integrity, the Model 1300 uses three layers of hardware ECC code, full read-after-write data verification, data-frame check-sums and data randomization.

The WangDAT Model 1300 is today's standard in the DAT industry, with a field-proven MTBF of over 50,000 hours—from WangDAT, a company you can count on. That's why you can be assured that every Model 1300 is the best DAT there is.





4MM DAT CASSETTE TAPE DRIVE

DRIVE DIMENSIONS

Height 1.625 in. (4.13cm) Width 5.75 in. (14.61cm) 8.00 in. (20.32cm) Depth

INTERFACE

Interface SCSI-1 or SCSI-2 (switch selectable) Specification X3.131-1986/QIC-104 (SCSI-1)

X3.131-198X (SCSI-2)

Device Type Sequential single-ended or half-high

differential (optional)

PERFORMANCE

1.3GB Capacity

Transfer Rate Sustained

183Kbytes/sec.

Burst (SCSI) 4.0Mbytes/sec. (asynchronous) 5.3Mbytes/sec. (synchronous)

Tape Speed

Read/Write 8.15mm/sec.

Average Access

Time 20 seconds Drum Speed 2000 rpm

Effective Tape

Speed 3.133m/sec. (123 ips) Number of Heads 4 (2R and 2W)

 $\pm 20^{\circ}$ Head Azimuth Linear Density 61Kbpi Track Pitch 13.6 µm Modulation 8/10 GCR

Reed Solomon ECC

GF (28) (32,28) C1 GF (28) (32,26) C2 C3 GF (28) (46,44) Record Length Fixed/variable

RELIABILITY

Error Rate Non-Recoverable <1 in 10¹⁵ bits

MTBF >50,000 hrs. (30% tape motion)

MTTR <30 min.

POWER

+5VDC

Tolerance $\pm 5\%$ Operational 1.0 amp nom.

1.5 amp max.

+12 VDC

Tolerance $\pm 10\%$ $0.25\,\mathrm{amp\,nom}$. Standby Operational 1.0 amp max.

Power Dissipation

Typical <11 watts Maximum 20 watts

ENVIRONMENTAL

Temperature

Operational 5 to 45°C (41 to 113°F) $-30 \text{ to } +60^{\circ}\text{C} (-22 \text{ to } +140^{\circ}\text{F})$ Storage

Relative Humidity

(non-condensing) 20 to 80%

RECORDING FORMAT

Specification DDS (HP/Sony) X3B5/90-085

ECMA 139

MEDIA

Industry-Standard 4mm Digital Audio Tape (DAT) Size

Height 10mm Width 73mm Depth 54mm Tape Width 3.81mm Tape Thickness 13µm Tape Length 60 meters

COMMANDS SUPPORTED BY THE MODEL 1300 COPY RECOVER BUFFERED ERASE DATA INQUIRY LOAD/UNLOAD RELEASE UNIT REQUEST BLOCK **ADDRESS** LOCATE LOG SELECT LOG SENSE REQUEST SENSE RESERVE UNIT MODE SELECT MODE SENSE REWIND SEEK BLOCK PREVENT/ALLOW SEND DIAGNOSTIC MEDIA REMOVAL SPACE TEST UNIT READY READ

READ BLOCK LIMITS VERIFY

WRITE READ BUFFER WRITE BUFFER READ POSITION WRITE FILEMARKS READ REVERSE

Specifications are subject to change without notice.

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West Coast Regional Office: 2685 Marine Way, Suite 1220-F, Mountain View, CA 94043, (415) 967-6496, FAX: (415) 967-9534.



MODEL 2600

3GB THE HIGH-PERFORMANCE/CAPACITY DAT

FEATURES

- 3GB capacity, 5GB with long tape.
- Fast sustained data rate of 520KB/second.
- Standard SCSI-1 or SCSI-2 interfaces (selectable).
- Reliable computer DAT mechanism.
- 5.25-inch half-high form factor.
- DDS[™] interchange with backward read/write capability.
- WangDAT Group Compression[™] format.
- 4MB per second asynchronous mode burst transfers.
- 5.3MB per second synchronous mode burst transfers.
- 20-second average access time.
- Stac 9703 data-compression coprocessor.
- "Look-aside" compression implementation prevents data expansion.
- Three-level ECC and read-after-write data check.

The WangDAT™ Model 2600 5.25-inch, half-high computer DAT (Digital Audio Tape) drive was developed to meet the industry demand for higher capacity and performance. The Model 2600 delivers 3 gigabytes of removable storage at transfer rates above 30 megabytes a minute, 50 percent faster than standard 8mm tape drives, in only half the physical space. Featuring a *look-aside* implementation of data compression that guarantees no data expansion, the Model 2600 offers the highest level of compression efficiency and also supports long-length tapes for storage as high as 5GB. Onboard data buffering of 768Kbytes and efficient tape repositioning underpin this drive's outstanding performance.

The Model 2600 utilizes the industry-accepted Stac 9703 compression coprocessor, incorporating a variant of the LZ1 algorithm, proven reliable by nearly one million users. The LZ1 approach is able to achieve high compression ratios even for data files which change their nature abruptly.

The Model 2600's computer DAT mechanism, proven in WangDAT's Model 1300 drive, uses direct drive reel motors, a four-head balanced drum with read-after-write heads, direct "in-path" closed-loop tension control and an independent capstan motor for reliable recording. And, the Model 2600 offers dual formats, the industry-standard DDS format for data interchange and the WangDAT Group Compression format for high-capacity local backup.

In the Model 2600, with the combination of higher capacity, fast data transfer, standard SCSI interface and DDS support, WangDAT offers you the best DAT there is.





4MM DAT CASSETTE TAPE DRIVE

DRIVE DIMENSIONS

 Height
 1.625 in. (4.13cm)

 Width
 5.75 in. (14.61cm)

 Depth
 8.00 in. (20.32cm)

INTERFACE

Interface SCSI-1 or SCSI-2 (switch selectable)
Specification X3.131-1986/QIC-104 (SCSI-1)
X3.131-198X (SCSI-2)

Device Type Sequential single-ended

PERFORMANCE

 Capacity
 DDS Mode
 Compression Mode

 60 Meter Tape
 1.3GB
 3.7GB

 90 Meter Tape
 2.0GB
 5.7GB

 Transfer Rate
 Sustained
 DDS Mode
 Compression Mode

Sustained <u>DDS Mode</u> <u>Compression Mode</u> 183Kbytes/sec. 520Kbytes/sec. Burst (SCSI) 4.0Mbytes/sec. (asynchronous) 5.3Mbytes/sec. (synchronous)

Tape Speed

Read/Write

Average Access

Time 20 seconds – 60 meter tape 30 seconds – 90 meter tape

8.15mm/sec.

Drum Speed 2000 rpm

Effective Tape

Speed 3.133m/sec. (123 ips)

Number of Heads 4 (2R and 2W)

 $\begin{array}{lll} \mbox{Head Azimuth} & \pm 20^{\circ} \\ \mbox{Linear Density} & 61\mbox{Kbpi} \\ \mbox{Track Pitch} & 13.6 \mbox{ } \mu m \\ \mbox{Modulation} & 8/10 \mbox{ } \mbox{GCR} \end{array}$

Reed Solomon ECC

 $\begin{array}{ccc} \text{C1} & \text{GF} \, (2^8) \, (32,28) \\ \text{C2} & \text{GF} \, (2^8) \, (32,26) \\ \text{C3} & \text{GF} \, (2^8) \, (46,44) \\ \text{Record Length} & \text{Fixed/variable} \end{array}$

RELIABILITY

Error Rate

Non-Recoverable <1 in 1015 bits

MTBF >50,000 hrs. (30% tape motion) MTTR <30 min. **POWER**

+5 VDC Tolerance ±5%

Operational 1.0 amp nom. 1.5 amp max.

+12 VDC

Tolerance $\pm 10\%$ Standby 0.3 amp nom. Operational 1.0 amp max.

Power Dissipation

Typical <8 watts Maximum 20 watts

ENVIRONMENTAL

Temperature
Operational 5 to 45°C (41 to 113°F)

Storage $-30 \text{ to } +60^{\circ}\text{C} (-22 \text{ to } +140^{\circ}\text{F})$

Relative Humidity

(non-condensing) 20 to 80%

RECORDING FORMAT

Specification(s) DDS (HP/Sony) X3B5/90-085

ECMA 139

Group Compression (WangDAT)

MEDIA

Industry-Standard 4mm Digital Audio Tape (DAT) Size

READ REVERSE

Height 10mm Width 73mm Depth 54mm

Tape Length 60 meters/90 meters

COMMANDS SUPPORTED BY THE MODEL 2600

RECOVER BUFFERED COPY **ERASE** DATA INQUIRY LOAD/UNLOAD RELEASE UNIT REQUEST BLOCK ADDRESS LOCATE LOG SELECT LOG SENSE REQUEST SENSE RESERVE UNIT REWIND MODE SELECT MODE SENSE SEEK BLOCK PREVENT/ALLOW SEND DIAGNOSTIC MEDIA REMOVAL SPACE READ TEST UNIT READY VERIFY READ BLOCK LIMITS READ BUFFER WRITE READ POSITION WRITE BUFFER

Model 2600 specifications data based upon 3.2:1 compressible user data. Specifications are subject to change without notice.

WRITE FILEMARKS

WangDAT and Group Compression are trademarks of WangDAT Inc., which is not affiliated with any other company using Wang as part of its name or trademark. DDS is a trademark of Hewlett-Packard/Sony.



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5GB DAT THE SECOND GENERATION 3.5"™

FEATURES

- Slim 3.5-inch DATAClass™ DAT mechanism.
- Over 5GB capacity with long tape.
- 520KB per second data transfer rate.
- 30-second average data access time.
- Software-transparent Group Compression.[™]
- DDS[™] format read/write capability.
- SCSI-1 or SCSI-2 interface (selectable).
- 5.3MB per second SCSI burst rate.
- 60,000 hour MTBF, single-board design.
- Automatic *Power-Safe*[™] tape braking.
- Stac 9703 compression coprocessor.
- "Look-aside" compression implementation prevents data expansion.

The WangDAT™ Model 3600 3.5-inch DAT (Digital Audio Tape) drive delivers the ultimate in tape capacity and performance in the industry's smallest form factor yet. With a capacity of 5 gigabytes and a transfer rate of over 30 megabytes a minute, the Model 3600 is the drive of choice for today's power workstations and smallfootprint file servers.

The Model 3600 features hardware data compression, implemented in a look-aside mode that guarantees no data expansion. WangDAT's design uses the industry-leading Stac 9703 compression coprocessor, incorporating a variant of the LZ1 algorithm, proven by nearly a million users and able to maintain high compression ratios even for files of a rapidly changing nature.

The Model 3600's DATAClass computer DAT mechanism with vertical hub engagement, is the latest advancement in load reliability, with directdrive reel motors for precision tape control, a four-head dynamically balanced drum with readafter-write heads, an independent capstan motor and direct "in-path" closed-loop tension control for reliable recording.

So if you're looking for a big solution in a very small package, try the Model 3600, the best DAT there is.





4MM DAT CASSETTE TAPE DRIVE

DRIVE DIMENSIONS

 Height
 1.625 in. (41.3mm)

 Width
 4.00 in. (101.6mm)

 Depth
 5.75 in. (146.1mm)

INTERFACE

Interface SCSI-1 or SCSI-2 (switch selectable)
Specification X3.131-1986/QIC-104 (SCSI-1)
X3.131-198X (SCSI-2)

Device Type Sequential single-ended

PERFORMANCE

 $\begin{array}{ccc} \text{Capacity} & \underline{\text{DDS Mode}} & \underline{\text{Compression Mode}} \\ 60\,\text{Meter Tape} & 1.3\text{GB} & 3.7\text{GB} \\ 90\,\text{Meter Tape} & 2.0\text{GB} & 5.7\text{GB} \\ \end{array}$

Transfer Rate
Sustained

DDS Mode
183Kbytes/sec.

DDS Mode
520 Kbytes/sec.

Burst (SCSI) 4.0Mbytes/sec. (asynchronous) 5.3Mbytes/sec. (synchronous)

8.15mm/sec.

Read/Write Average Access

Time

20 seconds – 60 meter tape 30 seconds – 90 meter tape

Drum Speed 2000 rpm

Effective Tape
Speed 3.133m/sec. (123 ips)
Number of Heads 4 (2R and 2W)

 $\begin{array}{lll} \mbox{Head Azimuth} & \pm 20^{\circ} \\ \mbox{Linear Density} & 61 \mbox{Kbpi} \\ \mbox{Track Pitch} & 13.6 \mbox{ } \mu \mbox{m} \\ \mbox{Modulation} & 8/10 \mbox{ } GCR \end{array}$

Reed Solomon ECC

 $\begin{array}{ccc} \text{C1} & \text{GF} \, (2^8) \, (32,28) \\ \text{C2} & \text{GF} \, (2^8) \, (32,26) \\ \text{C3} & \text{GF} \, (2^8) \, (46,44) \\ \text{Record Length} & \text{Fixed/variable} \end{array}$

RELIABILITY

Error Rate Non-Recoverable <1 in 10¹⁵ bits

MTBF >60,000 hrs. (30% tape motion)
MTTR <30 min.

POWER +5 VDC

 $\begin{array}{ll} \hbox{Tolerance} & \pm 5\% \\ \hbox{Operational} & 1.0 \, \hbox{amp nom.} \\ 1.3 \, \hbox{amp max.} \end{array}$

+12 VDC Tolerance

Power Dissipation

Typical <7 watts Maximum <11 watts

ENVIRONMENTAL

Temperature

Operational 5 to 45°C (41 to 113°F) Storage -30 to +60°C (-22 to +140°F)

Relative Humidity

(non-condensing) 20 to 80%

RECORDING FORMAT

Specification(s) DDS (HP/Sony) X3B5/90-231

ECMA 139

Group Compression (WangDAT)

MEDIA

Industry-Standard 4mm Digital Audio Tape (DAT) Size

READ REVERSE

Height 10mm Width 73mm Depth 54mm

Tape Length 60 meters/90 meters

COMMANDS SUPPORTED BY THE MODEL 3600

RECOVER BUFFERED COPY DATA **ERASE** RELEASE UNIT REQUEST BLOCK **INQUIRY** LOAD/UNLOAD **ADDRESS** LOCATE LOG SELECT LOG SENSE REQUEST SENSE RESERVE UNIT REWIND MODE SELECT MODE SENSE SEEK BLOCK PREVENT/ALLOW SEND DIAGNOSTIC MEDIA REMOVAL SPACE TEST UNIT READY READ READ BLOCK LIMITS **VERIFY** READ BUFFER WRITE READ POSITION WRITE BUFFER

 ${\it Model\,3600\,specifications\,data\,based\,upon\,3.2:1\,compressible\,user\,data.}$ Specifications are subject to change without notice.

WRITE FILEMARKS

WangDAT, the Second Generation 3.5", DATAClass, Power-Safe and Group Compression are trademarks of WangDAT Inc., which is not affiliated with any other company using Wang as part of its name or trademark. DDS is a trademark of Hewlett-Packard/Sony.



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West Coast Regional Office: 2685 Marine Way, Suite 1220-F, Mountain View, CA 94043, (415) 967-6496, FAX: (415) 967-9534.

Who Offers More?

The 8mm EXB-8200™ 2.5-gigabyte capacity 246KB/second

CAPACITY PERFORMANCE RELIABILITY VALUE

The 4mm WangDAT 2600 3.0-gigabyte capacity 400KB/second



WangDAT DAT's Who!

ONLY WANGDAT™ NOW DELIVERS A BETTER ALTERNATIVE TO 8MM.

At WangDAT, we've made your choice simple. WangDAT's new Model 2600 DAT with advanced data compression delivers more for a lot less. Three gigabytes to be exact. And 50 percent more performance than the standard you've learned to live with. The Model 2600 dual-format drive employs WangDAT Group Compression™ format for high-capacity local backup and the industry standard DDS™ format for data interchange.

Plus, WangDAT's half-high form factor puts all this capability into just

COMMITTED TOTAL TOTAL CONTROLLER		
Major Features	WangDAT2600	8mm (EXB-8200)
Data Capacity	3.0 Gbytes	2.5 Gbytes

COMPARE FOR YOURSELF

Transfer Rate	24 Mbytes/min.	15 Mbytes/min.
Form Factor	Half-High 5.25-in.	Full-High 5.25-in.
File Search Rate	56 Mbytes/sec.	2.46 Mbytes/sec.
Recording Format (s)	DDS (Certified) Group Compression	Sole-Sourced
MTBF Hours	50,000	40,000

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half the space. And DAT will cost you a whole lot less.

So if you're thinking 8mm, don't. Now, big things do come in small packages. WangDAT.

To learn more about the Model 2600, contact WangDAT, 151 Kalmus Drive, K3, Costa Mesa, California 92626, (714) 241-9613, FAX: (714) 241-9571.





FEATURES

 Three models offered — 1.3GB, 3GB and 5GB

SLIMLINE EXTERNAL DAT

- Free-standing low profile enclosure
- WangDAT DATAClass[™] DAT mechanism
- Certified DDS format read/write interchange
- Group Data Compression option (selectable)
- 183-520 KB/second data transfer rate
- Fast 20-30 second average file access time
- 5.3MB/sec. SCSI-1/SCSI-2 interface (selectable)
- Compatible with most 1/4", 1/2", 8mm systems
- 50,000 hour MTBF/10,000 hour heads
- Automatic Power-Safe[™] tape braking

The WangDAT SE Series DAT tape drives provide high-end compact storage for PC LANs, workstations, and multi-user systems. There are three SE models to choose from, in capacities from 1.3GB to over 5GB, including optional Group Data Compression™. And, with gigabytes of data on a single cassette, WangDAT's fast 20-30 second file search capability is invaluable. Data transfer rates are offered up to 30 megabytes per minute, simplifying even the biggest of backup tasks.

All SE models are free-standing drives with a built-in power supply and cooling fan. Their slimline packaging saves valuable space on the desktop, and the sleek appearance of the SE enclosure is a natural addition to today's newer systems.

Every SE drive incorporates WangDAT's DATAClass DAT mechanism, designed from the start for computer applications, and supporting an MTBF of 50,000 hours, for high reliability.





SLIMLINE EXTERNAL DAT

FEATURES

Models: 5130SE **5260SE** 2000SE Capacity - GBs DDS (60m/90m) 1.3/2.01.3/NA 1.3/NA GDC (60m/90m) 3.7/NA 3.7/5.7 Performance - KBS DDS/GDC 183/520 183/NA 183/520

DRIVE DIMENSIONS

Height 6.4 in. Width 2.8 in. 14.3 in. Depth <8 lbs. Weight

INTERFACE

Interface SCSI-1 or SCSI-2 (selectable)

Specifications SCSI-1 X3.131-1986 (QIC-104)

X3.131-199X SCSI-2 Device Type Single-Ended

4.0 Mbytes/sec. (Asynch) SCSI Burst Rate 5.3 Mbytes/sec. (Synch)

Tape Speed

Read/Write 8.15mm/sec. (.32 ips) Avg. Access Time 20 seconds - 60 meter tape 30 seconds - 90 meter tape

Drum Speed 2000 rpm

Effective Tape

3.133m/sec. (123 ips) Speed No. of Heads 4 (2R and 2W)

Head Azimuth ± 20° Linear Density 61 Kbpi Track Pitch 13.6 µm Modulation 8/10 GCR

Reed Solomon ECC Three level: C1; C2; C3

Fixed/Variable Record Length

RELIABILITY

Error Rate

Non-Recoverable <1 in 1015 bits read

50,000 hrs. (30% tape motion) **MTBF** <30 min.

MTTR

POWER

Voltage 115/230 VAC Frequency 50/60 Hz Type of Supply Auto-ranging Current 1.5/0.75 Amps **ENVIRONMENTAL**

Temperature 5 to 45°C (41 to 113°F) Operational

 $-30 \text{ to } +60^{\circ}\text{C} (-22 \text{ to } 140^{\circ}\text{F})$ Storage Relative Humidity 20 to 80% (Non-Condensing)

RECORDING FORMAT

Specification

X3.203-199X & ECMA 139 DDS (HP/Sony) Compression Group Data Compression (GDC)

MEDIA

4mm DAT Data Cassette

Tape Length

5130SE/5260SE: 60 meter

2000SE: 60 meter/90 meter

SCSI COMMANDS SUPPORTED

COPY RECOVER BUFFERED **ERASE** DATA **INQUIRY** RELEASE UNIT LOAD/UNLOAD REQUEST BLOCK LOCATE **ADDRESS** LOG SELECT REQUEST SENSE LOG SENSE RESERVE UNIT MODE SELECT REWIND MODE SENSE SEEK BLOCK PREVENT/ALLOW SEND DIAGNOSTIC

MEDIA REMOVAL SPACE

READ TEST UNIT READY

READ BLOCK LIMITS **VERIFY READ BUFFER** WRITE

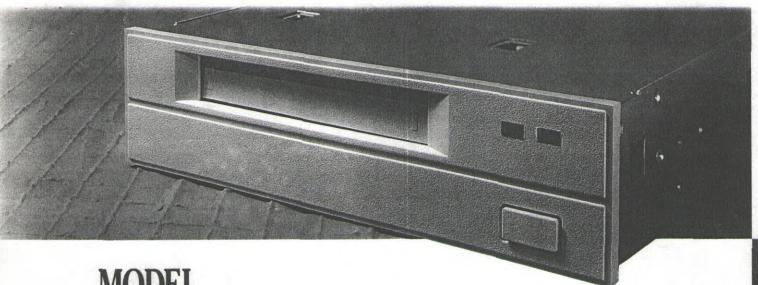
READ POSITION WRITE BUFFER READ REVERSE WRITE FILEMARKS

GDC specifications based upon 3.2:1 compressible user data. Specifications are subject to change without notice.

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MODEL 2000

2GB - 5.25" DAT DDS FORMAT PLUS COMPRESSION

FEATURES

- 5.25" half-high DATAClass™ DAT mechanism
- 2 GB capacity in DDS format, on 90 meter tape
- 5 GB Group Data Compression (selectable)
- 183-520 KB/second data transfer rate
- Large 768 Kbyte cache data buffer
- Less than 8 watts of power required
- 30 second average data access time
- SCSI-1 or SCSI-2 interface (selectable)
- 5.3MB/second SCSI burst rate
- 50,000 hour drive MTBF
- 10,000 hour long-life heads
- Automatic Power-Safe[™] tape braking

The WangDAT Model 2000 5.25-inch half-high DAT (Digital Audio Tape) drive offers leading capacity and performance for the more powerful workstations and local area networks in use today. This new DAT drive provides a capacity of 2 gigabytes in standard DDS format mode, with over 5 gigabytes available in the selectable Group Data Compression mode. File search is accomplished in an average of only 30 seconds, and data transfer rates reach up to 30 megabytes per minute in compression mode.

The Model 2000 employs WangDAT's 5.25-inch *DATAClass*[™] mechanism with direct-drive reel motors for optimum speed control, a four-head drum to support read-after-write, an independent capstan motor, and digitally controlled servo for precise speed and tape tension control. The Model 2000 provides industry leading reliability, supported by an MTBF of 50,000 hours and our long-life 10,000 hour recording heads. In addition, the on-board *Power-Safe*[™] reel braking system ensures gentle tape handling even during system power failures.



MODEL

2000

DDS FORMAT PLUS COMPRESSION

DRIVE DIMENSIONS

Height 1.625 in. (4.13cm)
Width 5.75 in. (14.61cm)
Depth 8.00 in. (20.32cm)

INTERFACE

Interface SCSI-1 or SCSI-2 (switch selectable)
Specification X3.131-1986/QIC-104 (SCSI-1)
X3.131-199X (SCSI-2)

Device Type Sequential single-ended

PERFORMANCE

 Capacity
 DDS Mode
 Compression Mode

 60 Meter Tape
 1.3GB
 3.7GB

 90 Meter Tape
 2.0GB
 5.7GB

 Transfer Rate
 5.7GB

Sustained DDS Mode Compression Mode 183Kbytes/sec. 520 Kbytes/sec.

Burst (SCSI) 4.0Mbytes/sec. (asynchronous) 5.3Mbytes/sec. (synchronous)

Tape Speed Read/Write 8.15mm/sec. Average Access

Time 20 seconds—60 meter tape 30 seconds—90 meter tape

Drum Speed 2000 rpm

Effective Tape

Speed 3.133m/sec. (123 ips) Number of Heads 4 (2R and 2W)

Head Azimuth $\pm 20^{\circ}$ Linear Density 61 Kbpi
Track Pitch 13.6 μ m
Modulation 8/10 GCR

Reed Solomon ECC

C1 GF (2⁸) (32,28) C2 GF (2⁸) (32,26) C3 GF (2⁸) (46,44) Record Length Fixed/variable

RELIABILITY

Error Rate
Non-Recoverable <1 in 10¹⁵ bits

MTBF 50,000 hrs. (30% tape motion)
MTTR <30 min.

POWER

+5 VDC Tolerance ±5%

Operational 1.0 amp nom.

1.3 amp max.

+12VDC

Tolerance ±10% Standby 0.15 amp nom. Operational .5 amp max.

Power Dissipation

Typical <8 watts Maximum 12 watts

ENVIRONMENTAL

Temperature 5 to 45°

Operational 5 to 45°C (41 to 113°F) Storage -30 to +60°C (-22 to +140°F)

Relative Humidity

(non-condensing) 20 to 80%

RECORDING FORMAT

Specification(s) DDS (HP/Sony) X3.203-199X

ECMA 139

Group Data Compression (WangDAT)

MEDIA

Industry-Standard 4mm Digital Audio Tape (DAT) Size

Height 10mm Width 73mm Depth 54mm

Tape Length 60 meters/90 meters

COMMANDS SUPPORTED BY THE MODEL 2000

COPY RECOVER BUFFERED **ERASE** DATA **INQUIRY** RELEASE UNIT LOAD/UNLOAD REQUEST BLOCK LOCATE **ADDRESS** REQUEST SENSE LOG SELECT LOG SENSE RESERVE UNIT MODE SELECT REWIND MODE SENSE SEEK BLOCK PREVENT/ALLOW SEND DIAGNOSTIC

MEDIA REMOVAL SPACE

READ TEST UNIT READY

READ BLOCK LIMITS VERIFY READ BUFFER WRITE

READ POSITION WRITE BUFFER
READ REVERSE WRITE FILEMARKS

Model 2000 specifications data based upon 3.2:1 compressible user data. Specifications are subject to change without notice.

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