

0661 Models 371 and 467

3 1/2 Winchester Drive Series
SCSI-2 Interface

IBM shipped the first movable-head disk storage product in 1957. Since that time, we have developed and shipped a wide range of DASD products, from diskettes to the 3390 Direct Access Storage Device.

Now we are offering a family of 3 1/2-inch drives, each incorporating the well-established Winchester technology, a disk storage approach developed and enhanced by IBM.

Product Description

The 0661 Models 371 and 467 with the Enhanced Small Computer System Interface (SCSI-2) provide high reliability, data integrity and exceptional performance. These 3 1/2-inch Winchester drives bring a new level of intelligence and storage capacity to a popular interface, giving system integrators and manufacturers leverage in leading-edge applications.

They are available with formatted capacities of 320 MB and 400 MB

Quality and Availability

IBM 3 1/2-inch drives are manufactured to stringent standards for quality and performance. Sensitive components are assembled in a rigidly controlled, clean environment.

Extensive quality control and testing procedures are used throughout the manufacturing process to assure product reliability and data integrity. The IBM manufacturing facilities can provide volume quantities with timely schedules

HIGHLIGHTS

- SCSI-2 interface
- Self-diagnostics
- Mini-mono metal-in-gap heads
- Full shock mounting

- Dedicated head landing zone
- Dedicated digital servo
- Horizontal, vertical or connector side down mounting
- 1:1 interleave
- 300,000 hour MTBF
- 64K byte data buffer on Model 371
- 128 K byte data buffer on Model 467
- Automatic actuator lock
- In-line sector sparing
- Read-ahead cache
- Downloadable SCSI firmware
- Brushless in-hub DC spindle motor
- Automatic thermal compensation
- Scatter/gather function support

Specifications	Model 371	Model 467
General		
Capacity		
Unformatted	371 MB	467 MB
Formatted (512/520)	320/325 MB	400/406 MB
Sectors (512/520)	48	48
User Cylinders	949	1199
User Tracks	13286	16786
Data Heads	14	14
Disks	8	8
Rotational Speed (RPM)	4316.06	4316.06
Recording Density (BPI)	37341 RLL	38427 RLL
Track Density (TPI)	1201.5	1469
Areal Density (Mbits/sq in)	44.9	56.4
Media Transfer Rate (MB/s)	2	2
Interface Transfer Rate (MB/s)	4	5
Latency (ms)	6.95	6.95
Access Timing		
(ms) Average	12.5	11.5
(ms) Trk/Trk Read	1.0	1.0
(ms) Trk/Trk Write	4.0	3.0
(ms) Maximum	25	20
Reliability Specifications		
MTBF*	300,000 Hours**	
Error Rates		
Hard Read Errors	1 per 10E 13 bits Read	
Seek Errors	1 per 10E 6 Seeks	

*Includes early life and end of life failures

**Measured on field performance

Environmental Specifications

Ambient Temperature	50 to 122 F (10 to 50 C)
Relative Humidity	8% to 80% Non-Condensing
Maximum Wet Bulb	80 F (26.7 C) Non-Condensing
Shock	
Operating	10 G's
Non-Operating	35 G's
Vibration	
Operating	0.55 G (17-130 Hz)
Non-Operating	0.5 G (2-200 Hz)

Power Requirements	Model 371	Model 467
+12 VDC +5%, -7% Nominal StartUp	3.9 Amps	3.9 Amps
+/-5% Maximum Seek	2.2 Amps	2.7 Amps
Average Idle	0.7 Amp	0.7 Amp
+5 VDC +/-5% Average Typical	0.7 Amp	0.7 Amp
Heat Dissipation Average Idle	11.9 Watts	11.9 Watts
Typical Seek	12.5 Watts	13.3 Watts

Physical Size	Models 371 & 467
Height	1.63 in. (41.3 mm)
Width	4.00 in. (101.6 mm)
Depth (HDA)	5.75 in. (146.0 mm)
Depth (Electronics Card)	6.00 in. (152.4 mm)
Weight	1.8 lb. (0.8 kg)

Specifications subject to change without notice

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