

Chapter 2

PORTABLE DRIVES

PRODUCT SPECIFICATIONS

This chapter provides dealer information for configuring Quantum's 2.5-inch hard disk drives for installation in notebook computers. Drive configuration information is included for the following drives:

Quantum Go•Drive ATA Bus Drives	GLS 85AT, GLS 127AT, GRS 160AT, GLS 170AT, and GLS 256AT
Quantum Daytona ATA Bus Drives	127AT, 170AT, 256AT, 341AT, and 514AT
Quantum Europa ATA Bus Drives	540AT, 810AT, and 1080AT
Quantum Go•Drive SCSI Bus Drives	GLS 85S, GLS 127S, GLS 170S, and GLS 256S
Quantum Daytona SCSI Bus Drives	127S, 170S, 256S, 341S, and 514S

CAUTION: Components located on the drive's printed circuit board (PCB) and on the computer main circuit board are sensitive to electrostatic discharge (ESD). Before you handle the drive or touch the interior of the computer, remove the static charge from your body by wearing a properly grounded antistatic wrist strap or by touching a grounded metal object. Handle the drive by its case or mounting brackets. Avoid touching the drive's circuit board or its components. Handle the drive with care. Careless handling can damage the drive's flex cables, which are exposed at the end of the drive (opposite the drive's connector) and on one side of the HDA.

Do not operate the drive on its metallized antistatic shipping bag. The bag's metallized surface can short out the drive's components. Do not use metal tools on or near the drive's PCB and do not remove the drive's circuit board.

2.1 TECHNICAL SPECIFICATIONS FOR 2.5-INCH DRIVES

Tables 2-1 and 2-2 provide technical specifications for Quantum 2.5-inch hard disk drives.

Note: The 2.5-inch products require only a 5.0V DC power source.

Table 2-1 *Quantum 2.5-Inch Disk Drive*

Model (by Capacity)	Quantum Go•Drive GLS 85AT ¹	Quantum Go•Drive GLS127AT ¹	Quantum Go•Drive GLS 170AT ¹
Drive Format:			
Formatted Capacity ²	85 MB	127 MB	170 MB
Logical Heads	10	9	10
Logical Cylinders	722	677	538
Logical Sectors Per Track	23	41	62
Physical Heads	2	3	4
Physical Disks	1	2	2
Physical Sectors Per Drive	166,083	249,822	333,561
Access Time:			
Average Seek Time	17 ms	17 ms	17 ms
Cache Buffer Size	96K	96K	96K
Field MTBF (POH)	> 350,000 (Projected)	> 350,000 (Projected)	> 350,000 (Projected)
Dimensions:			
Height (mm)	12.5	17	17
Width (mm)	70	70	70
Depth (mm)	100	100	100
Power Consumption (Typical):			
Idle	0.9 W	1.0 W	1.0 W
Seeking	2.0 W	2.0 W	2.0 W
Operating Temperature	5° - 55°C	5° - 55°C	5° - 55°C
¹ Additional information regarding Quantum Go•Drive and Quantum Daytona AT drives can be found in the appropriate product manual. ² Quantum defines a megabyte (MB) to be 1,000,000 bytes.			

AT Product Specifications

Quantum Go•Drive GLS 256AT¹	Quantum Daytona 127AT¹	Quantum Daytona 170AT¹	Quantum Daytona 256AT¹
256 MB	127 MB	170 MB	256 MB
11	9	10	11
723	677	538	723
63	41	62	63
6	2	3	4
3	1	2	2
501,039	249,901	333,939	501,073
17 ms	17 ms	17 ms	17 ms
96K	96K	96K	96K
> 350,000 (Projected)	> 350,000 (Projected)	> 350,000 (Projected)	> 350,000 (Projected)
19	12.5	12.5	12.5
70	70	70	70
100	100	100	100
1.0 W	1.2 W	1.2 W	1.2 W
2.0 W	2.5 W	2.5 W	2.5 W
5° - 55°C	5° - 55°C	5° - 55°C	5° - 55°C

Table 2-1 *Quantum 2.5-Inch Disk Drive*

Model (by Capacity)	Quantum Daytona 341AT¹	Quantum Daytona 514AT¹
Drive Format:		
Formatted Capacity ²	341 MB	514 MB
Logical Heads	15	16
Logical Cylinders	1,011	997
Logical Sectors Per Track	44	63
Physical Heads	6	8
Physical Disks	3	4
Physical Sectors Per Drive	667,894	1,005,569
Access Time:		
Average Seek Time	17 ms	17 ms
Cache Buffer Size	96K	96K
Field MTBF (POH)	> 350,000 (Projected)	> 350,000 (Projected)
Dimensions:		
Height (mm)	19	19
Width (mm)	70	70
Depth (mm)	100	100
Power Consumption (Typical):		
Idle	1.4 W	1.4 W
Seeking	2.7 W	2.7 W
Operating Temperature	5° - 55°C	5° - 55°C
¹ Additional information regarding Quantum Go•Drive, Quantum Daytona, and Quantum Europa AT drives can be found in the appropriate product manual. ² Quantum defines a megabyte (MB) to be 1,000,000 bytes.		

AT Product Specifications (Continued)

Quantum Europa 540AT¹	Quantum Europa 810AT¹	Quantum Europa 1080AT¹
540 MB	810 MB	1,080 MB
15	15	15
1,179	1,771	2,362
60	60	60
4	6	8
2	3	4
1,061,775	1,594,125	2,126,475
14 ms	14 ms	14 ms
86K	86K	86K
> 350,000 (Projected)	> 350,000 (Projected)	> 350,000 (Projected)
12.5 (±0.2)	18.8 (±0.2)	18.8 (±0.2)
70 (±0.2)	70 (±0.2)	70 (±0.2)
100 (±0.5)	100 (±0.5)	100 (±0.5)
1.1 W	1.1 W	1.1 W
2.6 W	2.6 W	2.6 W
5° - 55°C	5° - 55°C	5° - 55°C

Table 2-2 *Quantum 2.5-Inch Disk Drive*

Model (by Capacity)	Quantum Go•Drive GLS 85S¹	Quantum Go•Drive GLS 127S¹	Quantum Daytona 127S¹
Drive Format:			
Formatted Capacity ²	85 MB	127 MB	127 MB
Total Logical Blocks	166,083	249,822	249,901
Physical Heads	2	3	2
Physical Disks	1	2	1
Access Time:			
Average Seek Time	17 ms	17 ms	17 ms
Cache Buffer Size	96K	96K	96K
Field MTBF (POH)	> 350,000 (Projected)	> 350,000 (Projected)	> 350,000 (Projected)
Dimensions:			
Height (mm)	12.5	17	12.5
Width (mm)	70	70	70
Depth (mm)	100	100	100
Power Consumption:			
Standby	1.2 W	1.3 W	1.45 W
Seeking	2.5 W	2.5 W	2.75 W
Operating Temperature	5° - 55°C	5° - 55°C	5° - 55°C
¹ Additional information regarding Quantum Go•Drive and Quantum Daytona SCSI drives can be found in the appropriate product manual. ² Quantum defines a megabyte (MB) to be 1,000,000 bytes.			

SCSI Product Specifications

Quantum Go•Drive GLS 170S¹	Quantum Daytona 170S¹	Quantum Go•Drive GLS 256S¹	Quantum Daytona 256S¹	Quantum Daytona 341S¹	Quantum Daytona 514S¹
170 MB	170 MB	256 MB	256 MB	341 MB	514 MB
333,561	170,976	501,039	501,073	667,894	1,005,569
4	3	6	4	6	8
2	2	3	2	3	4
17 ms	17 ms	17 ms	17 ms	17 ms	17 ms
96K	96K	96K	96K	96K	96K
> 350,000 (Projected)	> 350,000 (Projected)	> 350,000 (Projected)	> 350,000 (Projected)	> 350,000 (Projected)	> 350,000 (Projected)
17	12.5	19	12.5	19	19
70	70	70	70	70	70
100	100	100	100	100	100
1.3 W	1.45 W	1.3 W	1.45 W	1.65 W	1.65 W
2.5 W	2.75 W	2.5 W	2.75 W	2.95 W	2.95 W
5° - 55°C	5° - 55°C	5° - 55°C	5° - 55°C	5° - 55°C	5° - 55°C

