

**Internal
SCSI Floppy Drive
Specifications
and
Drawings**

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Standard Internal Desktop 1.44M SCSI Floppy Drive

FEATURES

- Standard 50-pin SCSI I / II Interface.
- Low Power Consumption.
- Supports 720K, 1.2M, and 1.44M Media formats.

GENERAL DESCRIPTION

The G144SFBxx SCSI 1.44M floppy drives are available in Black Bezel Designs. They are supported in Windows 98SE, WinNT 4.0, XP, 2000, ME, and other Operating Systems that support SCSI Floppy Drives. Although specific Device Drivers are not available from GalaxyStor, this drive can utilize the native SCSI Device drivers of the Operating System and also are compatible with other third party SCSI 1.44M Floppy Drivers. The 1.44M SCSI Floppy Drive provides total read/ write compatibility in both ISO standard 2.0MB (high density 2HD) and 1.0MB(double density 2DD) modes of operation.

ORDERING INFORMATION

Part Number	Description
G144SFB	Internal SCSI1.44MB Floppy Disk Drive with Black Bezel
G144SFB1	Internal Desktop 1.44MB Floppy Disk Drive with Black Bezel and 5.25" Expansion Bracket
	** Other Options by Numerical Designation at end of Part Number as follows:
	3 - Custom ID and Termination Select (Default = ID 6 and Terminated)
	4 - Customer Specific
	5 - Customer Specific
	6 - Mounted in External SCSI Enclosure
	7 - Customer Specific
	8 - Bracket w/bottom mounting tabs
	** Alphabetic designation at end of part Number designates SCSI Firmware revision utilized by customer.

1.44M Floppy Drive Specs

Physical

Front Bezel	Black or Beige
Media Flap (Door)	Black or Beige
Eject Button	Black or Beige
LED Indicator	Green
Interface	50-pin SCSI I / II Compatible
Disc Loading	Manual Load / Eject
Dimensions	7.125" (L) x 4.00" (W) x 1.32" (H) 7.30" (L) x 5.90" (W) x 1.70" (H) w/ Expansion Bracket
Weight (Average)	500g
Mounting	Vertical / Horizontal with Spindle Motor Down
Mounting Hardware	WB00CCW - 5.25" Floppy Drive Expansion Bracket

Operation

Operation Mode	2 MB Mode	1 MB Mode
Applicable Media	2HD; 2DD	2DD
Capacity:		
Unformatted	2.0 MB	1.0 MB
Formatted (512 bytes/Sector)	1.38 MB	713 KB
Recording Method	MFM	MFM
Recording Density	17434 BPI	8717 BPI
Track Density	135 TPI	135 TPI
Cylinders	80	80
Tracks	160	160
Rotational Speed	300 rpm	300 rpm
Transfer Rate	500 kbit/sec	250 kbit/sec
Latency (Average)	100 ms	100 ms
Access Time:		
Average	94 ms	94 ms
Track to Track	3 ms	3 ms
Settling Time	15 ms	15 ms
Turn Around Time	4 ms	4 ms
Motor Start Time	0.5 sec	0.5 sec
Required Power	+5V single (4.5V ~ 5.5V)	+5V single (4.5V ~ 5.5V)
Signal Output Driver	CMOS, 3-state	CMOS, 3-state
Input Signal Pull-up	20K Ohm \pm 50%, non-removable	20K Ohm \pm 50%, non-removable

SCSI 1.44M Floppy Drive Specs (Continued)

Reliability

MTBF	30,000 POH
MTTR	30 minutes
Design Component Life	5 years or 15,000 POH
Disk Life	3 x 10 ⁶ passes/track
Disk Insertion	1.5 x 10 ⁴ times
Seek Operation	1 x 10 ⁷ random seeks
Preventive Maintenance	Not required for typical operation duty
Error Rate:	
Soft Errors	1 per 10 ⁹ bits read
Hard Errors	1 per 10 ¹² bits read
Seek Errors	1 per 10 ⁶ seek operations

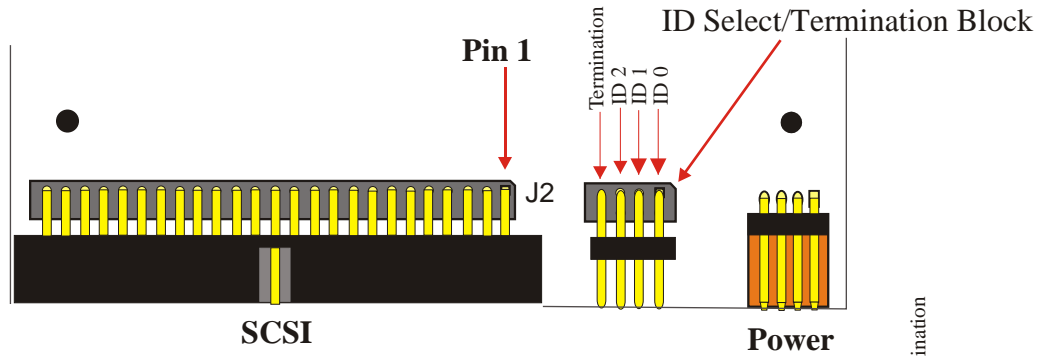
Environmental

Operating Temperature Range	5° C to 50° C
Non-operating Temperature Range	-20° C to 60° C
Operating Humidity Range	20 to 80% (Non-Condensing) Max. Wet Bulb Temperature @ 29.4° C
Non-operating Humidity Range	5 to 95% (Non-Condensing) Max. Wet Bulb Temperature @ 45° C
Operating Vibration	1.5G (10-100Hz, 1 octave/m sweep rate) 1.0G (100-200Hz, 1 octave/m sweep rate) 0.5G (200-600Hz, 1 octave/m sweep rate)
Non-operating Vibration	2G (10-100Hz, ¼ octave/m sweep rate)
Operating Shock	
Write & Read	5G (11ms, ½ sine wave)
Read Only	10G (11ms, ½ sine wave)
Non-operating Shock	70G (11ms, ½ sine wave)
Altitude	-980 ft ~ 16,400 ft. (-300m ~ 5,000m)
Acoustic Noise	45dB(A) MAX (500mm) 3ms or 6ms seek operation










SCSI 1.44M Floppy Drive Specs (Continued)**SCSI Settings**

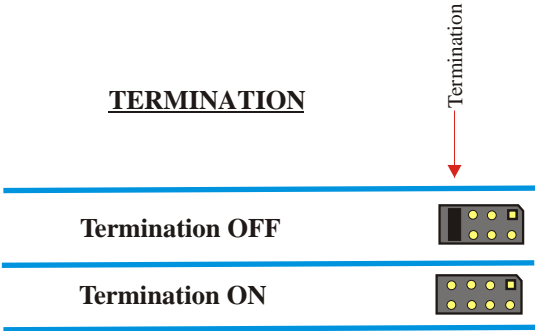
Termination	Active Termination, Jumper selectable
Parity Specification	Always ON
SCSI ID	ID 6 at factory (Jumper ID 0 to 7 Selectable)
Logical Unit Number	LUN 0 Set at Factory
Sync Mode	Runs in Asynchronous Mode

Rev. 5.0 Hydra SCSI Interface Board
ID Select and Termination Settings

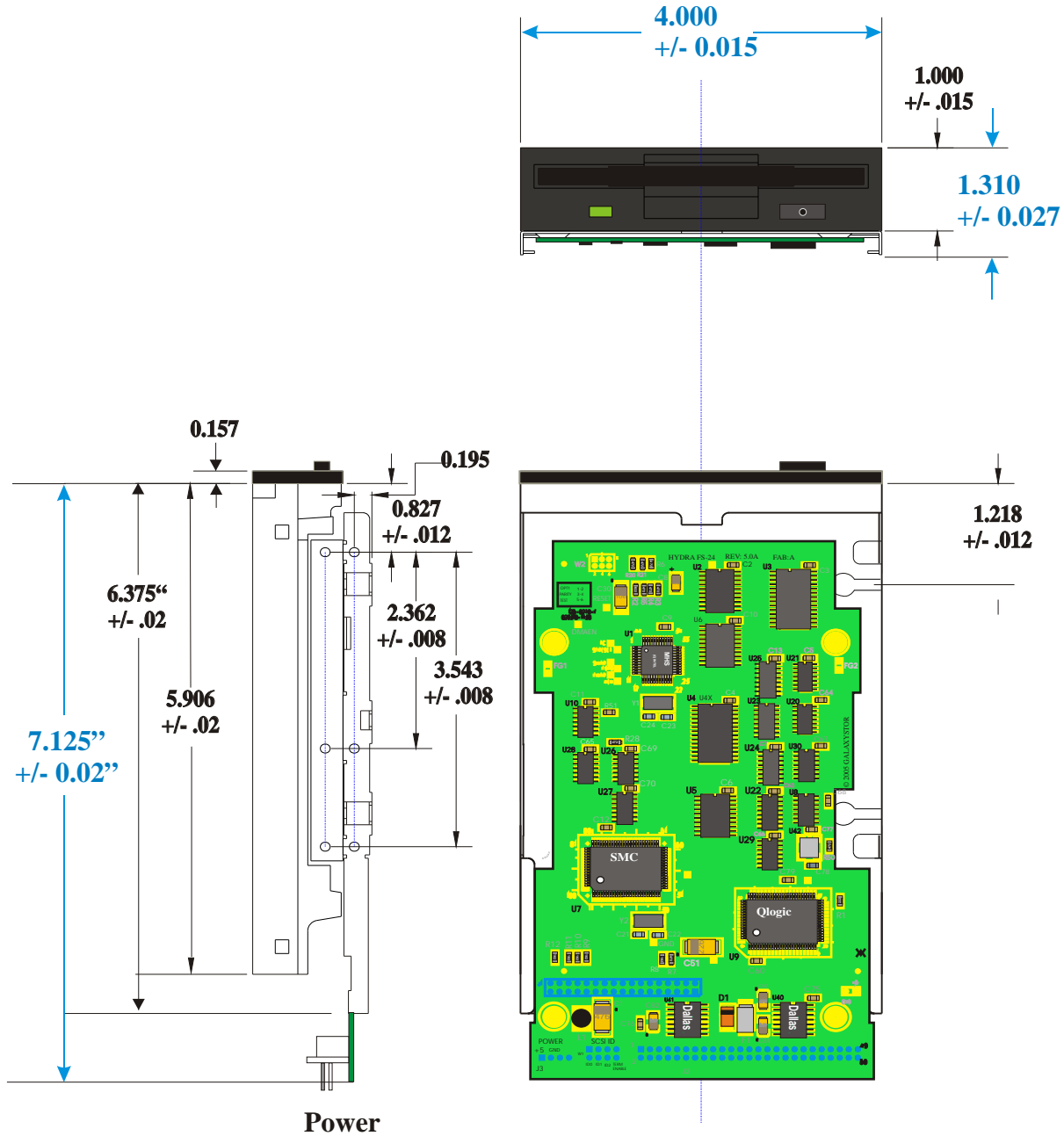


<u>SCSI ID</u>	<u>ID 0</u>	<u>ID 1</u>	<u>ID 2</u>
0	Open	Open	Open
1	Closed	Open	Open
2	Open	Closed	Open
3	Closed	Closed	Open
4	Open	Open	Closed
5	Closed	Open	Closed
6	Open	Closed	Closed
7	Closed	Closed	Closed

<u>SCSI ID</u>	<u>ID 2</u>	<u>ID 1</u>	<u>ID 0</u>	
0	Open	Open	Open	
1	Open	Open	Closed	
2	Open	Closed	Open	
3	Open	Closed	Closed	
4	Closed	Open	Open	
5	Closed	Open	Closed	
6	Closed	Closed	Open	
7	Closed	Closed	Closed	



Physical / Dimensional Drawing



Physical / Dimensional Drawing

