

## 2.0 Drive specifications

Unless otherwise noted, all specifications are measured under ambient conditions, at 25°C, and nominal power. For convenience, the phrases *the drive* and *this drive* are used throughout this manual to indicate the following drive models

5xxE Standard models
ST8000VX004

### 2.1 Specification summary tables

The specifications listed in the following tables are for quick reference. For details on specification measurement or definition, see the appropriate section of this manual.

**Table 1 Drive specifications summary**

Drive specification	ST8000VX004
Formatted (512 bytes/sector) <sup>#</sup>	8TB
Guaranteed sectors	(see <a href="#">Section 2.2</a> )
Heads	10
Discs	5
Bytes per logical sector	512
Bytes per physical sector	4096
Recording density, KBPI (Kb/in max)	2509
Track density, KTPI (ktracks/in, 0 skew)	371
Areal density, (Gb/in <sup>2</sup> , @ 0 skew mid-disk)	930
Spindle speed (RPM)	7200
Internal data transfer rate (Mb/s max)	2850
Sustained data transfer rate OD (MiB/s max)	200 (210 MB/s max)
I/O data-transfer rate (MB/s max)	600
ATA data-transfer modes supported	PIO modes 0–4 Multiword DMA modes 0–2 Ultra DMA modes 0–6
Cache buffer	256MB (262,144KB)
Weight: (maximum)	716g (1.579 lb)
Average latency	4.16ms
Power-on to ready (sec) (typ/max)	23/30
Standby to ready (sec) (typ/max)	23/30
Startup current (typical) 12V (peak)	1.8A
Voltage tolerance (including noise)	5V +10/-5% 12V ±10%
Non-Operating temperature	-40° to 70°C (Ambient Temperature, see sections <a href="#">2.6</a> and <a href="#">2.11</a> )
Operating temperature*	5°C
Operating temperature*	70°C
Temperature gradient (°C per hour max)	20°C (operating) 30°C (nonoperating)
Relative humidity*	5% to 95% (operating) 5% to 95% (nonoperating)
Relative humidity gradient	30% per hour max
Altitude, operating	-304.8 m to 3,048 m (-1000 ft to 10,000+ ft)