

```
root@PrivateNAS:~# smartctl -x /dev/sda
smartctl 6.6 2017-11-05 r4594 [armv7l-linux-4.4.190.armada.1] (local
build)
Copyright (C) 2002-17, Bruce Allen, Christian Franke,
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```

```
=== START OF INFORMATION SECTION ===
```

```
Model Family:      Hitachi Ultrastar A7K1000
Device Model:      Hitachi HUA721010KLA330
Serial Number:     GTE002PAJ6YKTE
LU WWN Device Id: 5 000cca 216df5840
Firmware Version:  GKA0AB0A
User Capacity:     1,000,204,886,016 bytes [1.00 TB]
Sector Size:       512 bytes logical/physical
Device is:         In smartctl database [for details use: -P show]
ATA Version is:    ATA/ATAPI-7 T13/1532D revision 1
Local Time is:     Sat Jul 18 12:36:59 2020 CEST
SMART support is:  Available - device has SMART capability.
SMART support is:  Enabled
AAM level is:      254 (maximum performance), recommended: 128
APM feature is:    Disabled
Rd look-ahead is:  Enabled
Write cache is:    Enabled
DSN feature is:    Unavailable
ATA Security is:   Disabled, NOT FROZEN [SEC1]
Wt Cache Reorder: Enabled
```

```
=== START OF READ SMART DATA SECTION ===
```

```
SMART overall-health self-assessment test result: PASSED
```

```
General SMART Values:
```

```
Offline data collection status: (0x84) Offline data collection
activity
                                was suspended by an interrupting command from
host.
```

```
                                Auto Offline Data Collection: Enabled.
```

```
Self-test execution status:      ( 0) The previous self-test
routine completed
```

```
                                without error or no self-test has ever
been run.
```

```
Total time to complete Offline
data collection:      (15354) seconds.
```

```
Offline data collection
capabilities:          (0x5b) SMART execute Offline immediate.
Auto Offline data collection on/off support.
Suspend Offline collection upon new
command.
Offline surface scan supported.
Self-test supported.
No Conveyance Self-test supported.
Selective Self-test supported.
```

```
SMART capabilities:    (0x0003) Saves SMART data before
entering
```

power-saving mode.
 Supports SMART auto save timer.
 Error logging capability: (0x01) Error logging supported.
 General Purpose Logging supported.
 Short self-test routine
 recommended polling time: (1) minutes.
 Extended self-test routine
 recommended polling time: (255) minutes.
 SCT capabilities: (0x003f) SCT Status supported.
 SCT Error Recovery Control supported.
 SCT Feature Control supported.
 SCT Data Table supported.

SMART Attributes Data Structure revision number: 16
 Vendor Specific SMART Attributes with Thresholds:

ID#	ATTRIBUTE_NAME	FLAGS	VALUE	WORST	THRESH	FAIL
RAW_VALUE						
1	Raw_Read_Error_Rate	P0-R--	100	100	016	0
2	Throughput_Performance	P-S---	100	100	054	0
3	Spin_Up_Time	POS---	104	104	024	669
(Average 673)						
4	Start_Stop_Count	-0--C-	095	095	000	22574
5	Reallocated_Sector_Ct	P0--CK	100	100	005	0
7	Seek_Error_Rate	P0-R--	100	100	067	0
8	Seek_Time_Performance	P-S---	134	134	020	32
9	Power_On_Hours	-0--C-	094	094	000	46707
10	Spin_Retry_Count	P0--C-	100	100	060	0
12	Power_Cycle_Count	-0--CK	100	100	000	2144
192	Power-Off_Retract_Count	-0--CK	082	082	000	22729
193	Load_Cycle_Count	-0--C-	082	082	000	22729
194	Temperature_Celsius	-0----	133	133	000	45
(Min/Max 14/58)						
196	Reallocated_Event_Count	-0--CK	100	100	000	0
197	Current_Pending_Sector	-0---K	100	100	000	0
198	Offline_Uncorrectable	---R--	100	100	000	0
199	UDMA_CRC_Error_Count	-0-R--	200	200	000	0
		_	K auto-keep			
		_	C event count			
		_	R error rate			
		_	S speed/performance			
		_	0 updated online			
		_	P prefailure warning			

General Purpose Log Directory Version 1
 SMART Log Directory Version 1 [multi-sector log support]

Address	Access	R/W	Size	Description
0x00	GPL,SL	R/O	1	Log Directory
0x01	SL	R/O	1	Summary SMART error log
0x03	GPL	R/O	1	Ext. Comprehensive SMART error log
0x06	SL	R/O	1	SMART self-test log
0x07	GPL	R/O	1	Extended self-test log
0x09	SL	R/W	1	Selective self-test log
0x10	GPL	R/O	1	NCQ Command Error log
0x11	GPL	R/O	1	SATA Phy Event Counters log

0x20	GPL	R/O	1	Streaming performance log [OBS-8]
0x21	GPL	R/O	1	Write stream error log
0x22	GPL	R/O	1	Read stream error log
0x80-0x9f	GPL,SL	R/W	16	Host vendor specific log
0xe0	GPL,SL	R/W	1	SCT Command/Status
0xe1	GPL,SL	R/W	1	SCT Data Transfer

SMART Extended Comprehensive Error Log Version: 1 (1 sectors)
No Errors Logged

SMART Extended Self-test Log Version: 1 (1 sectors)

Num	Test_Description	Status	Remaining
LifeTime(hours)	LBA_of_first_error		
# 1	Extended offline	Completed without error	00% 45607
-			
# 2	Extended offline	Completed without error	00% 44191
-			
# 3	Extended offline	Completed without error	00% 43782
-			
# 4	Extended offline	Completed without error	00% 43389
-			
# 5	Extended offline	Completed without error	00% 42980
-			
# 6	Extended offline	Completed without error	00% 42578
-			
# 7	Extended offline	Completed without error	00% 42181
-			
# 8	Extended offline	Completed without error	00% 41748
-			
# 9	Extended offline	Completed without error	00% 41147
-			
#10	Extended offline	Completed without error	00% 40729
-			
#11	Extended offline	Completed without error	00% 40353
-			
#12	Extended offline	Completed without error	00% 39929
-			
#13	Extended offline	Completed without error	00% 39499
-			
#14	Extended offline	Completed without error	00% 39097
-			
#15	Extended offline	Completed without error	00% 38687
-			
#16	Extended offline	Completed without error	00% 38279
-			
#17	Extended offline	Completed without error	00% 37863
-			
#18	Extended offline	Completed without error	00% 37457
-			

SMART Selective self-test log data structure revision number 1

SPAN	MIN_LBA	MAX_LBA	CURRENT_TEST_STATUS
1	0	0	Not_testing
2	0	0	Not_testing

3 0 0 Not_testing
4 0 0 Not_testing
5 0 0 Not_testing

Selective self-test flags (0x0):

After scanning selected spans, do NOT read-scan remainder of disk.
If Selective self-test is pending on power-up, resume after 0 minute delay.

SCT Status Version: 2
SCT Version (vendor specific): 256 (0x0100)
SCT Support Level: 1
Device State: SMART Off-line Data Collection
executing in background (4)
Current Temperature: 45 Celsius
Power Cycle Max Temperature: 47 Celsius
Lifetime Max Temperature: 58 Celsius

SCT Temperature History Version: 2
Temperature Sampling Period: 1 minute
Temperature Logging Interval: 1 minute
Min/Max recommended Temperature: 5/60 Celsius
Min/Max Temperature Limit: -40/65 Celsius
Temperature History Size (Index): 128 (104)

Index	Estimated Time	Temperature Celsius
105	2020-07-18 10:30	36 *****
...	..(2 skipped).	.. *****
108	2020-07-18 10:33	36 *****
109	2020-07-18 10:34	35 *****
...	..(4 skipped).	.. *****
114	2020-07-18 10:39	35 *****
115	2020-07-18 10:40	34 *****
...	..(5 skipped).	.. *****
121	2020-07-18 10:46	34 *****
122	2020-07-18 10:47	33 *****
...	..(7 skipped).	.. *****
2	2020-07-18 10:55	33 *****
3	2020-07-18 10:56	? -
4	2020-07-18 10:57	22 ***
5	2020-07-18 10:58	24 *****
6	2020-07-18 10:59	25 *****
7	2020-07-18 11:00	26 *****
8	2020-07-18 11:01	? -
9	2020-07-18 11:02	24 *****
10	2020-07-18 11:03	25 *****
11	2020-07-18 11:04	26 *****
12	2020-07-18 11:05	27 *****
13	2020-07-18 11:06	29 *****
14	2020-07-18 11:07	29 *****
15	2020-07-18 11:08	30 *****
16	2020-07-18 11:09	31 *****
17	2020-07-18 11:10	32 *****
18	2020-07-18 11:11	32 *****
19	2020-07-18 11:12	33 *****

20	2020-07-18 11:13	34	*****
21	2020-07-18 11:14	34	*****
22	2020-07-18 11:15	35	*****
23	2020-07-18 11:16	36	*****
24	2020-07-18 11:17	36	*****
25	2020-07-18 11:18	37	*****
26	2020-07-18 11:19	37	*****
27	2020-07-18 11:20	37	*****
28	2020-07-18 11:21	38	*****
...	..(2 skipped).	..	*****
31	2020-07-18 11:24	38	*****
32	2020-07-18 11:25	39	*****
...	..(5 skipped).	..	*****
38	2020-07-18 11:31	39	*****
39	2020-07-18 11:32	40	*****
...	..(9 skipped).	..	*****
49	2020-07-18 11:42	40	*****
50	2020-07-18 11:43	41	*****
51	2020-07-18 11:44	41	*****
52	2020-07-18 11:45	42	*****
53	2020-07-18 11:46	42	*****
54	2020-07-18 11:47	42	*****
55	2020-07-18 11:48	43	*****
...	..(2 skipped).	..	*****
58	2020-07-18 11:51	43	*****
59	2020-07-18 11:52	44	*****
...	..(3 skipped).	..	*****
63	2020-07-18 11:56	44	*****
64	2020-07-18 11:57	45	*****
...	..(7 skipped).	..	*****
72	2020-07-18 12:05	45	*****
73	2020-07-18 12:06	46	*****
74	2020-07-18 12:07	46	*****
75	2020-07-18 12:08	45	*****
76	2020-07-18 12:09	46	*****
...	..(9 skipped).	..	*****
86	2020-07-18 12:19	46	*****
87	2020-07-18 12:20	47	*****
...	..(9 skipped).	..	*****
97	2020-07-18 12:30	47	*****
98	2020-07-18 12:31	46	*****
99	2020-07-18 12:32	46	*****
100	2020-07-18 12:33	46	*****
101	2020-07-18 12:34	45	*****
...	..(2 skipped).	..	*****
104	2020-07-18 12:37	45	*****

SCT Error Recovery Control:
 Read: Disabled
 Write: Disabled

Device Statistics (GP/SMART Log 0x04) not supported

Pending Defects log (GP Log 0x0c) not supported

SATA Phy Event Counters (GP Log 0x11)

ID	Size	Value	Description
0x0001	2	0	Command failed due to ICRC error
0x0009	2	0	Transition from drive PhyRdy to drive PhyNRdy
0x000a	2	0	Device-to-host register FISes sent due to a COMRESET
0x000b	2	0	CRC errors within host-to-device FIS
0x000d	2	0	Non-CRC errors within host-to-device FIS

root@PrivateNAS:~# **smartctl -x /dev/sdb**

smartctl 6.6 2017-11-05 r4594 [armv7l-linux-4.4.190.armada.1] (local build)

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=== START OF INFORMATION SECTION ===

Model Family: Hitachi Ultrastar A7K1000
Device Model: Hitachi HUA721010KLA330
Serial Number: GTF002PAHZVHJF
LU WWN Device Id: 5 000cca 216dc1e1e
Firmware Version: GKAOAB0A
User Capacity: 1,000,204,886,016 bytes [1.00 TB]
Sector Size: 512 bytes logical/physical
Device is: In smartctl database [for details use: -P show]
ATA Version is: ATA/ATAPI-7 T13/1532D revision 1
Local Time is: Sat Jul 18 12:37:05 2020 CEST
SMART support is: Available - device has SMART capability.
SMART support is: Enabled
AAM level is: 254 (maximum performance), recommended: 128
APM feature is: Disabled
Rd look-ahead is: Enabled
Write cache is: Enabled
DSN feature is: Unavailable
ATA Security is: Disabled, NOT FROZEN [SEC1]
Wt Cache Reorder: Enabled

=== START OF READ SMART DATA SECTION ===

SMART overall-health self-assessment test result: PASSED

General SMART Values:

Offline data collection status: (0x84) Offline data collection
activity

was suspended by an interrupting command from
host.

Auto Offline Data Collection: Enabled.

Self-test execution status: (0) The previous self-test
routine completed

without error or no self-test has ever
been run.

Total time to complete Offline
data collection: (15354) seconds.

Offline data collection

capabilities: (0x5b) SMART execute Offline immediate.
 Auto Offline data collection on/off support.
 Suspend Offline collection upon new
 command.
 Offline surface scan supported.
 Self-test supported.
 No Conveyance Self-test supported.
 Selective Self-test supported.

SMART capabilities: (0x0003) Saves SMART data before
 entering
 power-saving mode.
 Supports SMART auto save timer.

Error logging capability: (0x01) Error logging supported.
 General Purpose Logging supported.

Short self-test routine
 recommended polling time: (1) minutes.

Extended self-test routine
 recommended polling time: (255) minutes.

SCT capabilities: (0x003f) SCT Status supported.
 SCT Error Recovery Control supported.
 SCT Feature Control supported.
 SCT Data Table supported.

SMART Attributes Data Structure revision number: 16

Vendor Specific SMART Attributes with Thresholds:

ID#	ATTRIBUTE_NAME	FLAGS	VALUE	WORST	THRESH	FAIL
RAW_VALUE						
1	Raw_Read_Error_Rate	P0-R--	100	100	016	0
2	Throughput_Performance	P-S---	100	100	054	0
3	Spin_Up_Time	POS---	101	101	024	688
(Average 688)						
4	Start_Stop_Count	-0--C-	096	096	000	19893
5	Reallocated_Sector_Ct	P0--CK	100	100	005	0
7	Seek_Error_Rate	P0-R--	100	100	067	0
8	Seek_Time_Performance	P-S---	132	132	020	33
9	Power_On_Hours	-0--C-	094	094	000	47729
10	Spin_Retry_Count	P0--C-	100	100	060	0
12	Power_Cycle_Count	-0--CK	100	100	000	2220
192	Power-Off_Retract_Count	-0--CK	084	084	000	20084
193	Load_Cycle_Count	-0--C-	084	084	000	20084
194	Temperature_Celsius	-0----	125	125	000	48
(Min/Max 14/66)						
196	Reallocated_Event_Count	-0--CK	100	100	000	0
197	Current_Pending_Sector	-0---K	100	100	000	0
198	Offline_Uncorrectable	---R--	100	100	000	0
199	UDMA_CRC_Error_Count	-0-R--	200	200	000	292

|||||_ K auto-keep
 |||||_ C event count
 ||||_ R error rate
 |||_ S speed/performance
 ||_ O updated online
 |_ P prefailure warning

```

SMART          Log Directory Version 1 [multi-sector log support]
Address        Access  R/W   Size  Description
0x00          GPL,SL  R/O    1    Log Directory
0x01           SL    R/O    1    Summary SMART error log
0x03          GPL    R/O    1    Ext. Comprehensive SMART error log
0x06           SL    R/O    1    SMART self-test log
0x07          GPL    R/O    1    Extended self-test log
0x09           SL    R/W    1    Selective self-test log
0x10          GPL    R/O    1    NCQ Command Error log
0x11          GPL    R/O    1    SATA Phy Event Counters log
0x20          GPL    R/O    1    Streaming performance log [OBS-8]
0x21          GPL    R/O    1    Write stream error log
0x22          GPL    R/O    1    Read stream error log
0x80-0x9f    GPL,SL  R/W   16    Host vendor specific log
0xe0          GPL,SL  R/W    1    SCT Command/Status
0xe1          GPL,SL  R/W    1    SCT Data Transfer

```

SMART Extended Comprehensive Error Log Version: 1 (1 sectors)
No Errors Logged

```

SMART Extended Self-test Log Version: 1 (1 sectors)
Num  Test_Description      Status                    Remaining
LifeTime(hours)  LBA_of_first_error
# 1  Extended offline        Completed without error    00%      46629
-
# 2  Extended offline        Completed without error    00%      45213
-
# 3  Extended offline        Completed without error    00%      44803
-
# 4  Extended offline        Completed without error    00%      44411
-
# 5  Extended offline        Completed without error    00%      44001
-
# 6  Extended offline        Completed without error    00%      43600
-
# 7  Extended offline        Completed without error    00%      43202
-
# 8  Extended offline        Completed without error    00%      42770
-
# 9  Extended offline        Completed without error    00%      42169
-
#10  Extended offline        Completed without error    00%      41751
-
#11  Extended offline        Completed without error    00%      41374
-
#12  Extended offline        Completed without error    00%      40951
-
#13  Extended offline        Completed without error    00%      40521
-
#14  Extended offline        Completed without error    00%      40119
-
#15  Extended offline        Completed without error    00%      39709
-
#16  Extended offline        Completed without error    00%      39301

```



```

-
#17 Extended offline    Completed without error    00%    38885
-
#18 Extended offline    Completed without error    00%    38479
-

```

SMART Selective self-test log data structure revision number 1

SPAN	MIN_LBA	MAX_LBA	CURRENT_TEST_STATUS
1	0	0	Not_testing
2	0	0	Not_testing
3	0	0	Not_testing
4	0	0	Not_testing
5	0	0	Not_testing

Selective self-test flags (0x0):

After scanning selected spans, do NOT read-scan remainder of disk.
If Selective self-test is pending on power-up, resume after 0 minute delay.

```

SCT Status Version:                2
SCT Version (vendor specific):      256 (0x0100)
SCT Support Level:                  1
Device State:                        SMART Off-line Data Collection
executing in background (4)
Current Temperature:                 48 Celsius
Power Cycle Max Temperature:         51 Celsius
Lifetime Max Temperature:            66 Celsius

```

```

SCT Temperature History Version:     2
Temperature Sampling Period:         1 minute
Temperature Logging Interval:        1 minute
Min/Max recommended Temperature:     5/60 Celsius
Min/Max Temperature Limit:           -40/65 Celsius
Temperature History Size (Index):     128 (14)

```

Index	Estimated Time	Temperature Celsius
15	2020-07-18 10:30	35 *****
...	..(18 skipped).	.. *****
34	2020-07-18 10:49	35 *****
35	2020-07-18 10:50	34 *****
...	..(2 skipped).	.. *****
38	2020-07-18 10:53	34 *****
39	2020-07-18 10:54	35 *****
40	2020-07-18 10:55	? -
41	2020-07-18 10:56	22 ***
42	2020-07-18 10:57	24 *****
43	2020-07-18 10:58	25 *****
44	2020-07-18 10:59	26 *****
45	2020-07-18 11:00	? -
46	2020-07-18 11:01	24 *****
47	2020-07-18 11:02	25 *****
48	2020-07-18 11:03	26 *****
49	2020-07-18 11:04	28 *****
50	2020-07-18 11:05	29 *****
51	2020-07-18 11:06	30 *****

52	2020-07-18 11:07	31	*****
53	2020-07-18 11:08	32	*****
54	2020-07-18 11:09	32	*****
55	2020-07-18 11:10	33	*****
56	2020-07-18 11:11	34	*****
57	2020-07-18 11:12	35	*****
58	2020-07-18 11:13	35	*****
59	2020-07-18 11:14	36	*****
60	2020-07-18 11:15	37	*****
61	2020-07-18 11:16	37	*****
62	2020-07-18 11:17	38	*****
63	2020-07-18 11:18	38	*****
64	2020-07-18 11:19	39	*****
65	2020-07-18 11:20	39	*****
66	2020-07-18 11:21	39	*****
67	2020-07-18 11:22	40	*****
68	2020-07-18 11:23	40	*****
69	2020-07-18 11:24	41	*****
70	2020-07-18 11:25	41	*****
71	2020-07-18 11:26	41	*****
72	2020-07-18 11:27	42	*****
...	..(2 skipped).	..	*****
75	2020-07-18 11:30	42	*****
76	2020-07-18 11:31	43	*****
...	..(8 skipped).	..	*****
85	2020-07-18 11:40	43	*****
86	2020-07-18 11:41	44	*****
87	2020-07-18 11:42	44	*****
88	2020-07-18 11:43	45	*****
89	2020-07-18 11:44	45	*****
90	2020-07-18 11:45	45	*****
91	2020-07-18 11:46	46	*****
...	..(2 skipped).	..	*****
94	2020-07-18 11:49	46	*****
95	2020-07-18 11:50	47	*****
...	..(5 skipped).	..	*****
101	2020-07-18 11:56	47	*****
102	2020-07-18 11:57	48	*****
...	..(6 skipped).	..	*****
109	2020-07-18 12:04	48	*****
110	2020-07-18 12:05	49	*****
...	..(8 skipped).	..	*****
119	2020-07-18 12:14	49	*****
120	2020-07-18 12:15	50	*****
121	2020-07-18 12:16	49	*****
122	2020-07-18 12:17	50	*****
...	..(2 skipped).	..	*****
125	2020-07-18 12:20	50	*****
126	2020-07-18 12:21	51	*****
127	2020-07-18 12:22	50	*****
0	2020-07-18 12:23	51	*****
...	..(4 skipped).	..	*****
5	2020-07-18 12:28	51	*****
6	2020-07-18 12:29	50	*****

```

 7    2020-07-18 12:30    50 *****
 8    2020-07-18 12:31    49 *****
... ..( 3 skipped). .. *****
12    2020-07-18 12:35    49 *****
13    2020-07-18 12:36    48 *****
14    2020-07-18 12:37    48 *****

```

```

SCT Error Recovery Control:
    Read: Disabled
    Write: Disabled

```

Device Statistics (GP/SMART Log 0x04) not supported

Pending Defects log (GP Log 0x0c) not supported

SATA Phy Event Counters (GP Log 0x11)

ID	Size	Value	Description
0x0001	2	0	Command failed due to ICRC error
0x0009	2	0	Transition from drive PhyRdy to drive PhyNRdy
0x000a	2	0	Device-to-host register FISes sent due to a COMRESET
0x000b	2	0	CRC errors within host-to-device FIS
0x000d	2	0	Non-CRC errors within host-to-device FIS

```

root@PrivateNAS:~# smartctl -x /dev/sdc
smartctl 6.6 2017-11-05 r4594 [armv7l-linux-4.4.190.armada.1] (local
build)
Copyright (C) 2002-17, Bruce Allen, Christian Franke,
www.smartmontools.org

```

=== START OF INFORMATION SECTION ===

```

Model Family:      Hitachi Ultrastar A7K1000
Device Model:      Hitachi HUA721010KLA330
Serial Number:     GTF002PAJ0V2TF
LU WWN Device Id: 5 000cca 216dc90f2
Firmware Version: GKA0AB0A
User Capacity:     1,000,204,886,016 bytes [1.00 TB]
Sector Size:       512 bytes logical/physical
Device is:         In smartctl database [for details use: -P show]
ATA Version is:    ATA/ATAPI-7 T13/1532D revision 1
Local Time is:     Sat Jul 18 12:37:10 2020 CEST
SMART support is:  Available - device has SMART capability.
SMART support is:  Enabled
AAM feature is:    Disabled
APM feature is:    Disabled
Rd look-ahead is:  Enabled
Write cache is:    Enabled
DSN feature is:    Unavailable
ATA Security is:   Disabled, NOT FROZEN [SEC1]
Wt Cache Reorder: Enabled

```

=== START OF READ SMART DATA SECTION ===

SMART overall-health self-assessment test result: PASSED

General SMART Values:

Offline data collection status: (0x84) Offline data collection activity was suspended by an interrupting command from host.

Auto Offline Data Collection: Enabled.
Self-test execution status: (0) The previous self-test routine completed without error or no self-test has ever been run.

Total time to complete Offline data collection: (15354) seconds.

Offline data collection capabilities: (0x5b) SMART execute Offline immediate. Auto Offline data collection on/off support. Suspend Offline collection upon new command. Offline surface scan supported. Self-test supported. No Conveyance Self-test supported. Selective Self-test supported.

SMART capabilities: (0x0003) Saves SMART data before entering power-saving mode. Supports SMART auto save timer.

Error logging capability: (0x01) Error logging supported. General Purpose Logging supported.

Short self-test routine recommended polling time: (1) minutes.

Extended self-test routine recommended polling time: (255) minutes.

SCT capabilities: (0x003f) SCT Status supported. SCT Error Recovery Control supported. SCT Feature Control supported. SCT Data Table supported.

SMART Attributes Data Structure revision number: 16

Vendor Specific SMART Attributes with Thresholds:

ID#	ATTRIBUTE_NAME	FLAGS	VALUE	WORST	THRESH	FAIL
RAW_VALUE						
1	Raw_Read_Error_Rate	P0-R--	100	100	016	- 0
2	Throughput_Performance	P-S---	100	100	054	- 76
3	Spin_Up_Time	POS---	099	099	024	- 701
(Average 704)						
4	Start_Stop_Count	-0--C-	096	096	000	- 18182
5	Reallocated_Sector_Ct	P0--CK	100	100	005	- 0
7	Seek_Error_Rate	P0-R--	100	100	067	- 0
8	Seek_Time_Performance	P-S---	134	134	020	- 32
9	Power_On_Hours	-0--C-	094	094	000	- 46639
10	Spin_Retry_Count	P0--C-	100	100	060	- 0
12	Power_Cycle_Count	-0--CK	100	100	000	- 2166
192	Power-Off_Retract_Count	-0--CK	085	085	000	- 18353
193	Load_Cycle_Count	-0--C-	085	085	000	- 18353

```

194 Temperature_Celsius      -0----- 122  122  000  -   49
   (Min/Max 14/67)
196 Reallocated_Event_Count -0--CK    100  100  000  -   0
197 Current_Pending_Sector  -0---K    100  100  000  -   0
198 Offline_Uncorrectable   ---R--    100  100  000  -   0
199 UDMA_CRC_Error_Count    -0-R--    200  200  000  -  119
      |||||_ K auto-keep
      |||||_ C event count
      ||||_  R error rate
      |||_   S speed/performance
      ||_    O updated online
      |_____ P prefailure warning

```

General Purpose Log Directory Version 1

SMART Log Directory Version 1 [multi-sector log support]

Address	Access	R/W	Size	Description
0x00	GPL,SL	R/O	1	Log Directory
0x01	SL	R/O	1	Summary SMART error log
0x03	GPL	R/O	1	Ext. Comprehensive SMART error log
0x06	SL	R/O	1	SMART self-test log
0x07	GPL	R/O	1	Extended self-test log
0x09	SL	R/W	1	Selective self-test log
0x10	GPL	R/O	1	NCQ Command Error log
0x11	GPL	R/O	1	SATA Phy Event Counters log
0x20	GPL	R/O	1	Streaming performance log [OBS-8]
0x21	GPL	R/O	1	Write stream error log
0x22	GPL	R/O	1	Read stream error log
0x80-0x9f	GPL,SL	R/W	16	Host vendor specific log
0xe0	GPL,SL	R/W	1	SCT Command/Status
0xe1	GPL,SL	R/W	1	SCT Data Transfer

SMART Extended Comprehensive Error Log Version: 1 (1 sectors)

No Errors Logged

SMART Extended Self-test Log Version: 1 (1 sectors)

Num	Test_Description	Status	Remaining
LifeTime(hours)	LBA_of_first_error		
# 1	Extended offline	Completed without error	00% 45539
-			
# 2	Extended offline	Completed without error	00% 44123
-			
# 3	Extended offline	Completed without error	00% 43714
-			
# 4	Extended offline	Completed without error	00% 43322
-			
# 5	Extended offline	Completed without error	00% 42912
-			
# 6	Extended offline	Completed without error	00% 42511
-			
# 7	Extended offline	Completed without error	00% 42113
-			
# 8	Extended offline	Completed without error	00% 41680
-			
# 9	Extended offline	Completed without error	00% 41080

```

-
#10 Extended offline Completed without error 00% 40662
-
#11 Extended offline Completed without error 00% 40285
-
#12 Extended offline Completed without error 00% 39862
-
#13 Extended offline Completed without error 00% 39432
-
#14 Extended offline Completed without error 00% 39030
-
#15 Extended offline Completed without error 00% 38621
-
#16 Extended offline Completed without error 00% 38212
-
#17 Extended offline Completed without error 00% 37796
-
#18 Extended offline Completed without error 00% 37390
-

```

SMART Selective self-test log data structure revision number 1

SPAN	MIN_LBA	MAX_LBA	CURRENT_TEST_STATUS
1	0	0	Not_testing
2	0	0	Not_testing
3	0	0	Not_testing
4	0	0	Not_testing
5	0	0	Not_testing

Selective self-test flags (0x0):

After scanning selected spans, do NOT read-scan remainder of disk.
If Selective self-test is pending on power-up, resume after 0 minute delay.

```

SCT Status Version:                2
SCT Version (vendor specific):      256 (0x0100)
SCT Support Level:                  1
Device State:                        SMART Off-line Data Collection
executing in background (4)
Current Temperature:                 49 Celsius
Power Cycle Max Temperature:         52 Celsius
Lifetime Max Temperature:            67 Celsius

```

```

SCT Temperature History Version:    2
Temperature Sampling Period:        1 minute
Temperature Logging Interval:       1 minute
Min/Max recommended Temperature:    5/60 Celsius
Min/Max Temperature Limit:         -40/65 Celsius
Temperature History Size (Index):   128 (106)

```

Index	Estimated Time	Temperature Celsius
107	2020-07-18 10:30	35 *****
...	..(4 skipped).	.. *****
112	2020-07-18 10:35	35 *****
113	2020-07-18 10:36	34 *****
...	..(16 skipped).	.. *****

2	2020-07-18 10:53	34	*****
3	2020-07-18 10:54	35	*****
4	2020-07-18 10:55	?	-
5	2020-07-18 10:56	22	***
6	2020-07-18 10:57	24	*****
7	2020-07-18 10:58	25	*****
8	2020-07-18 10:59	26	*****
9	2020-07-18 11:00	?	-
10	2020-07-18 11:01	24	*****
11	2020-07-18 11:02	25	*****
12	2020-07-18 11:03	26	*****
13	2020-07-18 11:04	28	*****
14	2020-07-18 11:05	29	*****
15	2020-07-18 11:06	30	*****
16	2020-07-18 11:07	31	*****
17	2020-07-18 11:08	32	*****
18	2020-07-18 11:09	32	*****
19	2020-07-18 11:10	33	*****
20	2020-07-18 11:11	34	*****
21	2020-07-18 11:12	35	*****
22	2020-07-18 11:13	36	*****
23	2020-07-18 11:14	36	*****
24	2020-07-18 11:15	37	*****
25	2020-07-18 11:16	37	*****
26	2020-07-18 11:17	38	*****
27	2020-07-18 11:18	38	*****
28	2020-07-18 11:19	39	*****
29	2020-07-18 11:20	39	*****
30	2020-07-18 11:21	40	*****
31	2020-07-18 11:22	40	*****
32	2020-07-18 11:23	41	*****
...	..(2 skipped).	..	*****
35	2020-07-18 11:26	41	*****
36	2020-07-18 11:27	42	*****
37	2020-07-18 11:28	42	*****
38	2020-07-18 11:29	42	*****
39	2020-07-18 11:30	43	*****
...	..(3 skipped).	..	*****
43	2020-07-18 11:34	43	*****
44	2020-07-18 11:35	44	*****
...	..(5 skipped).	..	*****
50	2020-07-18 11:41	44	*****
51	2020-07-18 11:42	45	*****
52	2020-07-18 11:43	45	*****
53	2020-07-18 11:44	46	*****
...	..(2 skipped).	..	*****
56	2020-07-18 11:47	46	*****
57	2020-07-18 11:48	47	*****
...	..(5 skipped).	..	*****
63	2020-07-18 11:54	47	*****
64	2020-07-18 11:55	48	*****
...	..(3 skipped).	..	*****
68	2020-07-18 11:59	48	*****
69	2020-07-18 12:00	49	*****

```

... ..( 9 skipped). .. *****
79 2020-07-18 12:10 49 *****
80 2020-07-18 12:11 50 *****
... ..( 5 skipped). .. *****
86 2020-07-18 12:17 50 *****
87 2020-07-18 12:18 51 *****
... ..( 3 skipped). .. *****
91 2020-07-18 12:22 51 *****
92 2020-07-18 12:23 50 *****
93 2020-07-18 12:24 52 *****
... ..( 3 skipped). .. *****
97 2020-07-18 12:28 52 *****
98 2020-07-18 12:29 51 *****
99 2020-07-18 12:30 50 *****
100 2020-07-18 12:31 50 *****
101 2020-07-18 12:32 50 *****
102 2020-07-18 12:33 49 *****
... ..( 3 skipped). .. *****
106 2020-07-18 12:37 49 *****

```

SCT Error Recovery Control:
 Read: Disabled
 Write: Disabled

Device Statistics (GP/SMART Log 0x04) not supported

Pending Defects log (GP Log 0x0c) not supported

SATA Phy Event Counters (GP Log 0x11)

ID	Size	Value	Description
0x0001	2	0	Command failed due to ICRC error
0x0009	2	0	Transition from drive PhyRdy to drive PhyNRdy
0x000a	2	0	Device-to-host register FISes sent due to a COMRESET
0x000b	2	0	CRC errors within host-to-device FIS
0x000d	2	0	Non-CRC errors within host-to-device FIS

```

root@PrivateNAS:~# smartctl -x /dev/sdd
smartctl 6.6 2017-11-05 r4594 [armv7l-linux-4.4.190.armada.1] (local
build)
Copyright (C) 2002-17, Bruce Allen, Christian Franke,
www.smartmontools.org

```

=== START OF INFORMATION SECTION ===

```

Model Family:      Hitachi Ultrastar A7K1000
Device Model:      Hitachi HUA721010KLA330
Serial Number:     GTE002PAJ6XALE
LU WWN Device Id: 5 000cca 216df53a0
Firmware Version:  GKA0AB0A
User Capacity:     1,000,204,886,016 bytes [1.00 TB]
Sector Size:       512 bytes logical/physical
Device is:         In smartctl database [for details use: -P show]
ATA Version is:    ATA/ATAPI-7 T13/1532D revision 1

```


Local Time is: Sat Jul 18 12:37:14 2020 CEST
SMART support is: Available - device has SMART capability.
SMART support is: Enabled
AAM feature is: Disabled
APM feature is: Disabled
Rd look-ahead is: Enabled
Write cache is: Enabled
DSN feature is: Unavailable
ATA Security is: Disabled, NOT FROZEN [SEC1]
Wt Cache Reorder: Enabled

=== START OF READ SMART DATA SECTION ===
SMART overall-health self-assessment test result: PASSED

General SMART Values:
Offline data collection status: (0x84) Offline data collection
activity
was suspended by an interrupting command from
host.

Auto Offline Data Collection: Enabled.
Self-test execution status: (0) The previous self-test
routine completed
without error or no self-test has ever
been run.

Total time to complete Offline
data collection: (15354) seconds.

Offline data collection
capabilities: (0x5b) SMART execute Offline immediate.
Auto Offline data collection on/off support.
Suspend Offline collection upon new
command.
Offline surface scan supported.
Self-test supported.
No Conveyance Self-test supported.
Selective Self-test supported.

SMART capabilities: (0x0003) Saves SMART data before
entering
power-saving mode.
Supports SMART auto save timer.

Error logging capability: (0x01) Error logging supported.
General Purpose Logging supported.

Short self-test routine
recommended polling time: (1) minutes.

Extended self-test routine
recommended polling time: (255) minutes.

SCT capabilities: (0x003f) SCT Status supported.
SCT Error Recovery Control supported.
SCT Feature Control supported.
SCT Data Table supported.

SMART Attributes Data Structure revision number: 16

Vendor Specific SMART Attributes with Thresholds:

ID#	ATTRIBUTE_NAME	FLAGS	VALUE	WORST	THRESH	FAIL
-----	----------------	-------	-------	-------	--------	------

RAW_VALUE

1	Raw_Read_Error_Rate	P0-R--	100	100	016	-	0
2	Throughput_Performance	P-S---	100	100	054	-	38
3	Spin_Up_Time	POS---	103	103	024	-	678
(Average 680)							
4	Start_Stop_Count	-0--C-	096	096	000	-	16712
5	Reallocated_Sector_Ct	P0--CK	100	100	005	-	2
7	Seek_Error_Rate	P0-R--	100	100	067	-	0
8	Seek_Time_Performance	P-S---	134	134	020	-	32
9	Power_On_Hours	-0--C-	094	094	000	-	46421
10	Spin_Retry_Count	P0--C-	100	100	060	-	0
12	Power_Cycle_Count	-0--CK	100	100	000	-	2160
192	Power-Off_Retract_Count	-0--CK	086	086	000	-	16863
193	Load_Cycle_Count	-0--C-	086	086	000	-	16863
194	Temperature_Celsius	-0-----	127	127	000	-	47
(Min/Max 13/60)							
196	Reallocated_Event_Count	-0--CK	100	100	000	-	2
197	Current_Pending_Sector	-0---K	100	100	000	-	0
198	Offline_Uncorrectable	---R--	100	100	000	-	0
199	UDMA_CRC_Error_Count	-0-R--	200	200	000	-	0

|||||_ K auto-keep
 |||||_ C event count
 |||_ R error rate
 ||_ S speed/performance
 ||_ 0 updated online
 |_ P prefailure warning

General Purpose Log Directory Version 1

SMART Log Directory Version 1 [multi-sector log support]

Address	Access	R/W	Size	Description
0x00	GPL,SL	R/O	1	Log Directory
0x01	SL	R/O	1	Summary SMART error log
0x03	GPL	R/O	1	Ext. Comprehensive SMART error log
0x06	SL	R/O	1	SMART self-test log
0x07	GPL	R/O	1	Extended self-test log
0x09	SL	R/W	1	Selective self-test log
0x10	GPL	R/O	1	NCQ Command Error log
0x11	GPL	R/O	1	SATA Phy Event Counters log
0x20	GPL	R/O	1	Streaming performance log [OBS-8]
0x21	GPL	R/O	1	Write stream error log
0x22	GPL	R/O	1	Read stream error log
0x80-0x9f	GPL,SL	R/W	16	Host vendor specific log
0xe0	GPL,SL	R/W	1	SCT Command/Status
0xe1	GPL,SL	R/W	1	SCT Data Transfer

SMART Extended Comprehensive Error Log Version: 1 (1 sectors)

No Errors Logged

SMART Extended Self-test Log Version: 1 (1 sectors)

Num	Test_Description	Status	Remaining
# 1	Extended offline	Completed without error	00% 45321
-			
# 2	Extended offline	Completed without error	00% 43905
-			

```

# 3 Extended offline Completed without error 00% 43496
-
# 4 Extended offline Completed without error 00% 43104
-
# 5 Extended offline Completed without error 00% 42694
-
# 6 Extended offline Completed without error 00% 42293
-
# 7 Extended offline Completed without error 00% 41895
-
# 8 Extended offline Completed without error 00% 41463
-
# 9 Extended offline Completed without error 00% 40862
-
#10 Extended offline Completed without error 00% 40444
-
#11 Extended offline Completed without error 00% 40068
-
#12 Extended offline Completed without error 00% 39644
-
#13 Extended offline Completed without error 00% 39215
-
#14 Extended offline Completed without error 00% 38812
-
#15 Extended offline Completed without error 00% 38403
-
#16 Extended offline Completed without error 00% 37995
-
#17 Extended offline Completed without error 00% 37579
-
#18 Extended offline Completed without error 00% 37173
-

```

SMART Selective self-test log data structure revision number 1

SPAN	MIN_LBA	MAX_LBA	CURRENT_TEST_STATUS
1	0	0	Not_testing
2	0	0	Not_testing
3	0	0	Not_testing
4	0	0	Not_testing
5	0	0	Not_testing

Selective self-test flags (0x0):

After scanning selected spans, do NOT read-scan remainder of disk.
If Selective self-test is pending on power-up, resume after 0 minute delay.

```

SCT Status Version:                2
SCT Version (vendor specific):     256 (0x0100)
SCT Support Level:                  1
Device State:                        SMART Off-line Data Collection
executing in background (4)
Current Temperature:                47 Celsius
Power Cycle Max Temperature:        49 Celsius
Lifetime Max Temperature:           60 Celsius

```

SCT Temperature History Version: 2
 Temperature Sampling Period: 1 minute
 Temperature Logging Interval: 1 minute
 Min/Max recommended Temperature: 5/60 Celsius
 Min/Max Temperature Limit: -40/65 Celsius
 Temperature History Size (Index): 128 (101)

Index	Estimated Time	Temperature Celsius
102	2020-07-18 10:30	33 *****
...	..(10 skipped).	.. *****
113	2020-07-18 10:41	33 *****
114	2020-07-18 10:42	32 *****
...	..(10 skipped).	.. *****
125	2020-07-18 10:53	32 *****
126	2020-07-18 10:54	33 *****
127	2020-07-18 10:55	? -
0	2020-07-18 10:56	22 ***
1	2020-07-18 10:57	24 *****
2	2020-07-18 10:58	25 *****
3	2020-07-18 10:59	26 *****
4	2020-07-18 11:00	? -
5	2020-07-18 11:01	24 *****
6	2020-07-18 11:02	25 *****
7	2020-07-18 11:03	26 *****
8	2020-07-18 11:04	27 *****
9	2020-07-18 11:05	28 *****
10	2020-07-18 11:06	29 *****
11	2020-07-18 11:07	30 *****
12	2020-07-18 11:08	31 *****
13	2020-07-18 11:09	32 *****
14	2020-07-18 11:10	32 *****
15	2020-07-18 11:11	33 *****
16	2020-07-18 11:12	34 *****
17	2020-07-18 11:13	35 *****
18	2020-07-18 11:14	35 *****
19	2020-07-18 11:15	36 *****
20	2020-07-18 11:16	36 *****
21	2020-07-18 11:17	37 *****
22	2020-07-18 11:18	37 *****
23	2020-07-18 11:19	38 *****
24	2020-07-18 11:20	38 *****
25	2020-07-18 11:21	38 *****
26	2020-07-18 11:22	39 *****
...	..(2 skipped).	.. *****
29	2020-07-18 11:25	39 *****
30	2020-07-18 11:26	40 *****
...	..(2 skipped).	.. *****
33	2020-07-18 11:29	40 *****
34	2020-07-18 11:30	41 *****
...	..(3 skipped).	.. *****
38	2020-07-18 11:34	41 *****
39	2020-07-18 11:35	42 *****
...	..(5 skipped).	.. *****
45	2020-07-18 11:41	42 *****

```

46 2020-07-18 11:42 43 *****
47 2020-07-18 11:43 43 *****
48 2020-07-18 11:44 43 *****
49 2020-07-18 11:45 44 *****
50 2020-07-18 11:46 44 *****
51 2020-07-18 11:47 44 *****
52 2020-07-18 11:48 45 *****
... ..( 2 skipped). .. *****
55 2020-07-18 11:51 45 *****
56 2020-07-18 11:52 46 *****
... ..( 4 skipped). .. *****
61 2020-07-18 11:57 46 *****
62 2020-07-18 11:58 47 *****
... ..( 10 skipped). .. *****
73 2020-07-18 12:09 47 *****
74 2020-07-18 12:10 48 *****
... ..( 11 skipped). .. *****
86 2020-07-18 12:22 48 *****
87 2020-07-18 12:23 49 *****
... ..( 2 skipped). .. *****
90 2020-07-18 12:26 49 *****
91 2020-07-18 12:27 48 *****
92 2020-07-18 12:28 49 *****
93 2020-07-18 12:29 48 *****
... ..( 2 skipped). .. *****
96 2020-07-18 12:32 48 *****
97 2020-07-18 12:33 47 *****
... ..( 3 skipped). .. *****
101 2020-07-18 12:37 47 *****

```

SCT Error Recovery Control:
 Read: Disabled
 Write: Disabled

Device Statistics (GP/SMART Log 0x04) not supported

Pending Defects log (GP Log 0x0c) not supported

SATA Phy Event Counters (GP Log 0x11)

ID	Size	Value	Description
0x0001	2	0	Command failed due to ICRC error
0x0009	2	0	Transition from drive PhyRdy to drive PhyNRdy
0x000a	2	0	Device-to-host register FISes sent due to a COMRESET
0x000b	2	0	CRC errors within host-to-device FIS
0x000d	2	0	Non-CRC errors within host-to-device FIS