

SMART

S.M.A.R.T. (Self-Monitoring, Analysis, and Reporting Technology)

smart

```
apt install smartmontools -y
```

```
smartctl -i {}
```

SMART

```
smartctl -s on ( )
```

pass/failed

```
smartctl -H ( )
```

```
smartctl -t ( )
```

- offline # 1. No entry is placed in the selftest log.
- # 2. The effects of this test are visible only in that it updates the SMART offline

Attribute values

short # harddisk (check the electrical and mechanical performance)

long # Offline Extended self-test

conveyance() # intended to identify damage incurred during transporting of the device

select,M-N # to test a range of disk LBAs

pending,N

afterselect,on afterselect,off

sd sat[]usb[]

[]short

[]

```
smartctl -c ([ ])
```

[]

```
smartctl -X
```

[]

```
smartctl -l error /dev/sdd
```

[]

-l type # Prints either the SMART Error Log (TYPE: error, selftest, selective, directory, ssd)

-l error => offline test []

prints the Summary SMART error log

SMART disks maintain a log of the most recent five non-trivial errors

the disk power-on lifetime at which the error occurred is recorded

-l selftest => "short", "long" test []

The time at which the test took place, measured in hours of disk lifetime

-l ssd => prints the Solid State Media percentage used endurance indicator

(0 indicates as new condition while 100 indicates the device is at the end of its lifetime)

If any errors were detected, the Logical Block Address (LBA) of the first error is printed in decimal notation.

[]





```
smartctl -A ([ ])
```

[]

[]S.M.A.R.T.[]HDD/SDD[]

S.M.A.R.T.[]

- **Reallocated Sector Count** []
- **Current Pending Sector Count** []
- **Seek Error Rate** []HDD[]

- **Read Error Rate** 
- **Uncorrectable Sector Count** 
- **Spin Retry Count:**  HDD-  HDD



S.M.A.R.T. Current Normalized, Worst Threshold

S.M.A.R.T.  S.M.A.R.T.  “Current” “Worst” “







“Current”

- 
- 








“Worst”

- 
- 

“Normalized”

-  “ ”  0-100 0-200
- 

“Threshold”

-  “ ”  “ ”
-  “ ”  “ ” 

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