9/9/2020

C3 Cabling

Location: 7243 Switchgrass lane

* 2713 SQ FT
* 4 Bed
* 4 Full Bath
* 1 Half Bath
* 3.5 garages
* 1 stories

The floorplan can be found on the following website: <https://www.highlandhomes.com/houston/katy/cane-island/560-031>

The house comes with a standard Cat 6 and the following are the available upgrades.

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| --- | --- | --- | --- |
| Category | Cost | MAX transmission speed (at a 100 meters) | MAX bandwidth |
| Cat 6 | 200/1000ft | 1000Mbps/1Gbps | >250MHz |
| Cat 6a | 255/1000ft | 1000Mbps/1Gbps | 500 MHz |
| Cat 7 | 340/1000ft | 10000Mbps/10Gbps | 600 MHz |
| Cat 7a | 400/1000ft | 10000Mbps/10Gbps | 1000Mhz |

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Cat 3, Cat 5, Cat 5e are not upgrade options because they are slow and inefficient compared to the above categories. Cat 7a currently offers the highest specification Ethernet cables but they are very expensive. Although they are more expensive than Cat 6, I chose Cat 7 as an upgrade because it can reach up to 100Gbps at a range of 15 meters which makes it excellent choice for connecting modems or routers directly to device.

Work cited

Martindale, Jon. “Differences Between Ethernet Cables Explained: Cat 5, Cat 6a, Etc.” *Digital Trends*, Digital Trends, 27 July 2020, www.digitaltrends.com/computing/different-types-of-ethernet-cables-explained/.