Using the Cable Test Live tool

Cisco Meraki MS Series switches have the ability to allow for per-port cable testing. This can be an invaluable feature when trying to troubleshoot a problematic or faulty cable as well as determine the estimated cable length.

Make sure the cable is connected to devices at both ends, before running this test.

To perform a cable test using Dashboard, navigate to Monitor -> Switches and select the "Cable Test" Live Tool. Next, enter the port or port range (ie. "1" or "1-24" without quotes) into the test window and click the Play button.

Once the Play button is clicked, you can receive one of several test result outputs (both general and per twisted pair):

- **OK**: Good cable, good pair
- **OPEN**: Unused/unterminated pair
- **ABNORMAL**: The impedance* is not within the expected bounds, either too high or too low
- **COUPLEX**: Specified pair too strongly coupled to pair X, indicating high amount of crosstalk

*Proper termination of Cat5/6 cable requires a 100Ω differential impedance between the positive and negative cable terminals. The IEEE 802.3 allows for a termination of as high as 115 Ω or as low as 85 Ω. If the termination falls outside of this range, it is reported by the cable diagnostics as an anomalous termination.

The cable test will also output which pair is open if you have an open pair on your Ethernet cable. The diagram below illustrates how the pairs are numbered in a T568B straight through cable RJ-45 pinout.
This cable test allows for the ability to eliminate common layer 1 cabling issue by outputting cable length and testing the status of each cable pair.

For more information, see Cable Testing using the Meraki MS Ethernet Switch.