What are the three items measured in the 3D test for fiber optic patch cords



Overview

When producing fiber optic patch cord assemblies, manufacturers use 3D interferometer (which is an optical interferometry instrument) to check the fiber optic connector endface and strictly control the dimensions of the connector endface. 3D Metrology Test:. Here are three tests that truly matter when judging fiber optic quality. It involves inspection of a connector's endface at the microscopic level by measuring curve, tilt, and height differences down to a micron. It might sound technical, but the impact is huge. The 3D test is the critical.



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What are the three items measured in the 3D test for fiber optic pat



The three main properties measured are the radius of curvature, apex offset, and fiber height. As you can see in the image below, radius of curvature is the roundness of the ferrule''s ...



The 3D test mainly measures the radius of curvature, vertex offset and fiber height. The values measured by the 3D interferometer will vary according to different polishing methods and types of the ...



The three key fiber patch cable quality assurance testings include three-dimensional (3D) metrology test, which mainly contains three parameters: radius of curvature, apex offset, and fiber ...



Learn the 3 key tests for fiber jumpers—3D metrology, insertion & return loss, and end-face inspection—to ensure high-quality fiber optic performance.



Different polishing methods and types of fiber patch cords will have different values tested with 3D interferometer, but all tested fiber patch cords should meet or exceed the industry accepted ...

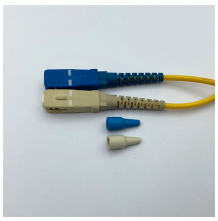
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This article will introduce three kinds of tests: 3D metrology test, insertion loss (IL) test, return loss (RL) test and end face test.



A radius of curvature that exceeds the test standard results in light scattering or insufficient physical contact to ensure excellent transmission performance. Only a proper radius of ...



If the height of the fiber is too high, the pressure in the fiber will be increased when the two fiber connectors are connected, thereby damaging the fiber; if the height of the fiber is too low, there ...



Three key areas are inspected in this test which includes apex offset, fiber height, and radius of curvature. This is the distance between the fiber core and the highest point on the ferrule''s ...



This post is going to introduce the three tests: 3D metrology, insertion loss (IL) test & return loss (RL) test, and endface clarify, which provide end users with confidence that the patch cables are high ...

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