Waveguide Quick-Connect

Connect Waveguide with Ease from 33 GHz to 1 THz and Beyond

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OVERVIEW

- 1. How was this Product Invented?
- 2. What is it?
- 3. Benefits
- 4. Conclusions
- 5. Web Link



• The idea was from Eravant's own <u>Testing Experience</u>.

- Using waveguide screws to make the test set and DUT connections can cause scratches and marks on DUT surface.
- Using waveguide screws could strip the threaded holes or remove the gold-plated surface of DUT during the testing.
- Using waveguide screws to make the test set and DUT connections is time consuming.
- Using waveguide screws degrades the waveguide performance and shortens the equipment lifespan.
- Improper connections between the test set and DUT by using waveguide screws, i.e., waveguide cocking can result inconsistent or bad data.
- Tight space between the test set and DUT may make the connections between the test set and DUT difficult or impossible.

HOW WAS THIS PRODUCT INVENTED?

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WHAT IS IT?

- Two models are offered to cover operating frequency from 33 to 1 THz or beyond.
 - <u>SWH-QC-0750C-R2</u>, 0.75" Diameter for UG-385/U through UG-387/U-M standard waveguide flanges covering 50 GHz to 1 THz.
 - <u>SWH-QC-1125C-R2</u>, 1.125" Diameter for UG-383/U and UG-383/U-M standard waveguide flanges covering 33 GHz to 60 GHz.
- We only need to use two thumb screws to make the waveguide connection easily reliable.





0.75" Diameter

1.25" Diameter





BENEFIT 1: Avoid Waveguide Screws

- The waveguide screws can scratch the DUT flanges.
- The waveguide screws can remove the gold-plated surface of threaded holes.



BENEFIT 2: Solve the Tight Space Waveguide Connection Challenges

• The tight space made the screw connection method impossible.

BÈNEFITS







BENEFIT 3: Increase the Testing Speed

• Screwing and unscrewing to make waveguide connections is time consuming





BENEFIT 4: Provide More Reliable and Accurate Test Data

• Waveguide cocking is a common issue when using waveguide screws to make the connections.

BÈNEFITS



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BENEFIT 5: Readily Mountable on the Support

Combined with the standard waveguide support, models <u>SWH-QC-0750C-RS-B</u> and <u>SWH-QC-1125C-RS-B</u>, the Waveguide Quick-Connects are ready to form secured waveguide test setups.

BENEFITS





Waveguide Quick-Connect - A Revolutionary Waveguide Connecting Technology

- Waveguide Quick-Connect can eliminate the DUT surface scratching.
- Waveguide Quick-Connect can improve the waveguide connection efficiency.
- Waveguide Quick-Connect can avoid waveguide cocking.
- Waveguide Quick-Connect can solve the tight space between test equipment and DUT.
- Waveguide Quick-Connects are readily to form secured waveguide test setups.

CONCLUSIONS

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https://www.eravant.com/products/test-hardwareaccessories/waveguide-quick-connects

