STQ-TO-28-S1-CKIT1-CF

WR-28 Waveguide Vector Analyzer Calibration Kit, Proxi-Flange™, Metrology Grade

STQ-TO-28-S1-CKIT1-CF is a metrology grade A-band waveguide vector network analyzer (VNA) calibration kit designed to work with industry standard network analyzers in the frequency range of 26.5 to 40 GHz. The calibration kit consists of one fixed short, one fixed matching load, waveguide shims (⅛ λg, ¼ λg, ⅜ λg offsets), twenty 3/32 hex head waveguide screws, six 3/32 hex head extended waveguide screws, four alignment dowel pins, a 3/32" hex waveguide screwdriver and one calibration data USB drive. The cal-kit also features a pair of 2.5" metrology grade, WR-28 straight sections with Eravant trademarked Proxi-Flange™, patented, contactless flange, models **STQ-WG-28025-FB-CF**. Proxi-Flange™ contains an array of small pin-like structures acting as RF choke to reduce losses caused by imperfect contact between mating flanges, and allows for screw-less rapid testing. The calibration kit is collected in a ruggedized box and is an ideal higher performance metrology grade calibration set for VNA system calibration. **The calibration kit can be offered with NIST traceable calibration data and certification for an added fee.** Calibration data will be provided in Excel format. If other file types are needed, they can be converted using the following **Cal Kit Editor**.

Components Included in the Kit:

Item	Eravant Model Number	Quantity
Metrology Proxi-Flange™ Contactless Flange	STQ-WG-28025-FB-CF	2 pc.
Metrology Fixed Short	STQ-WS-A-F1	1 pc.
Metrology Fixed Waveguide Load	STQ-WL-2823-S1	1 pc.
Metrology ⅛ Wavelength Offset	STQ-WI-28057-SB	1 pc.
Metrology ¼ Wavelength Offset	STQ-WI-28115-SB	1 pc.
Metrology ⅜ Wavelength Offset	STQ-WI-28172-SB	1 pc.
Waveguide Screws, 3/32 Hex Head	SWH-332-SS-10	2 Bags (20 pc.)
Extended Waveguide Screws, 3/32 Hex Head	SWH-332590-SS-01	6 pc.
Alignment Dowel Pin	SWH-625-PS-01	4 pc.
Waveguide Screwdriver, 3/32 Hex Head	SWH-332-DS	1 pc.
Calibration Data, USB Driver	STQ-TO-28-S1-U	1 pc.

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FEATURES

- Contactless Connection
- Precisely Machined and Manufactured
- Metrology Grade
- High Electrical Performance
- NIST Traceable

APPLICATIONS

- VNA & SNA Calibration
- General Test Lab Instrumentation
- Automated Test Setup
- Volume Production Testing

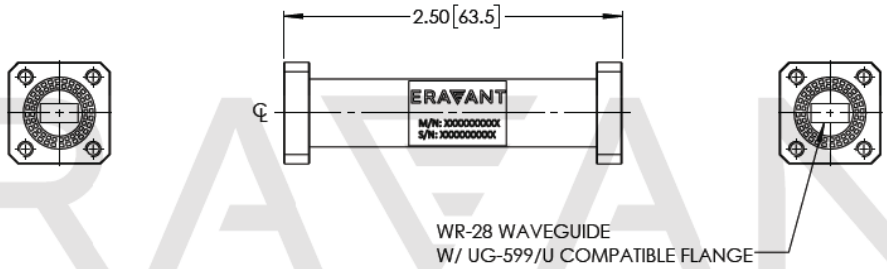
RECOMMENDED PAIRINGS

- Wave-Glide™ Rail System
- Proxi-Flange™ Contactless Flange

Electrical and Mechanical Specifications:

Item	Specification
Fixed Load VSWR	1.032:1 (Max)
Fixed Load Power Handling	0.2 Watts (Max)
Total Number of Included Hardware	11
Waveguide Flange	WR-28 Waveguide with UG-599/U Flange
Waveguide Material	Beryllium Copper (BeCu)
Waveguide Finish	Gold Plated, MIL-G-45204 or ASTM B488
Size	8.41” [214 mm] x 6.76” [172 mm] x 3.87” [98 mm]
Outline	TO-A-CKIT-CF

Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



NOTE:

- On condition test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C case temperature.
- Other mechanical configurations with different lengths and other frequency bands are available under different model numbers.
- The Proxi-Flange™ family is a trademarked and patented product of Eravant.
- Eravant reserves the right to change the information presented without notice.

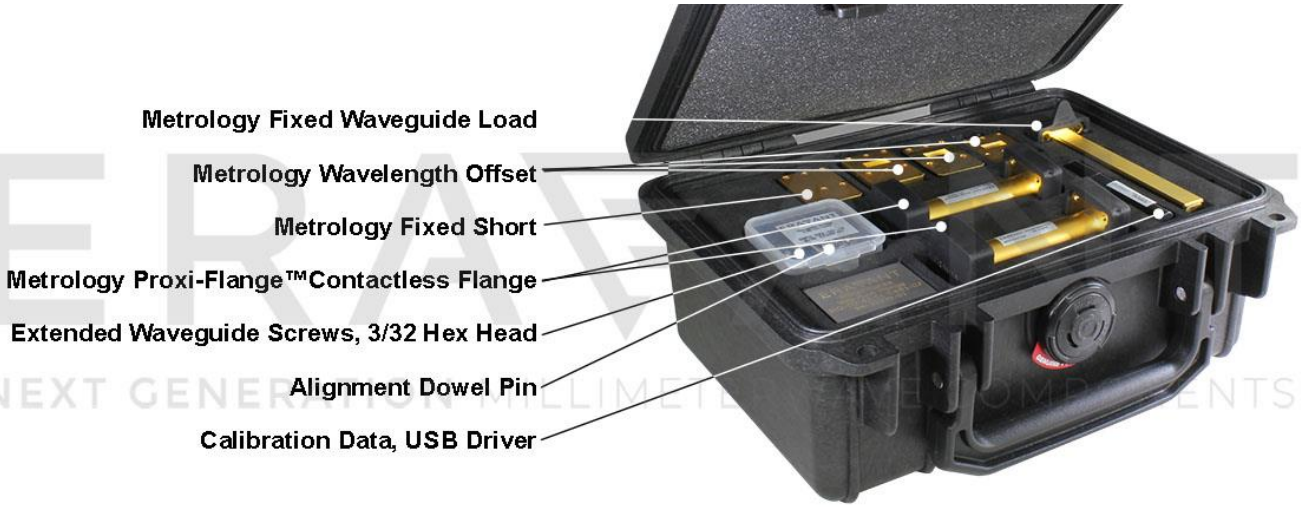
CAUTION:

- Any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.

APPENDIX: CONTACTLESS FLANGE AND CASE FRONT VIEW

STQ Contactless Flange Front View

STQ Case Outside View



STQ Case Inside View

APPENDIX: STQ-WG-28025-FB-CF TYPICAL PERFORMANCE

Typical Performance vs. Frequency