

SSL/TRL Calibration Kits

Mega Industries offers a complete line of precision waveguide kits that can be used to offer accurate calibration of Vector Network Analyzer systems.

Traditional coaxial calibration kits utilize three impedance standards and one transmission standard to fully effect a full two port calibration. The standards normally used are Short, Open, Load and a Through connection resulting in the common "**SOLT Coaxial Calibration Kit**" nomenclature for this kit.

Unlike Coaxial kits, where a "calibrated short" and "calibrated open" are readily achievable, waveguide calibration kits utilize Offset Short-Circuit sections to represent these two parameters. The length of the offsets, which are set as $\lambda/8$ and $3\lambda/8$ long, are designed to provide a balanced phase response over the waveguide operating frequency range. Mega also provides a precision waveguide sliding load to provide optimum performance over the complete waveguide band. Since waveguide flanges mate together, a special through connection is not required resulting in the **Short Short Load (SSL)** Style Waveguide Calibration Kit.



SSL Calibration Kit (WR2300 pictured)

In addition, Mega provides precision Coaxial to Waveguide Transitions, which typically display a VSWR of better than 1.15:1 over the complete waveguide band and better than 1.10:1 over more than 80% of this band. These precision transitions provide for extreme accuracy when measuring low insertion loss devices.

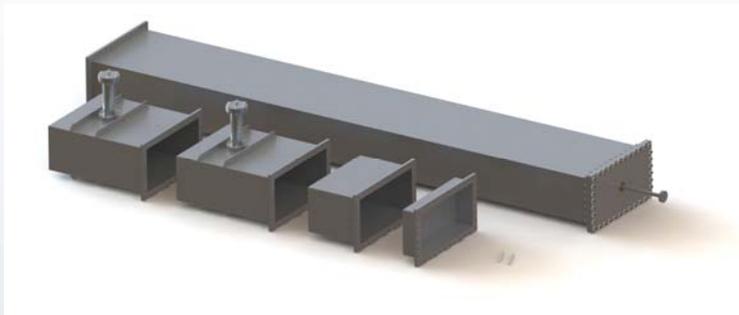
Another version of this calibration kit offered by Mega is the **Thru Reflect Line (TRL)** two port calibration kit. This kit utilizes 3 standards to define the calibrated reference plane. Precision waveguide to coaxial transitions are used in conjunction with a "flush" Short circuit plate and a precision $\lambda/4$ waveguide section designed to provide a balanced phase response over the waveguide operating frequency range.



TRL Calibration Kit (WR2300 pictured)

Catalog Numbers								
	SSL	TRL		SSL	TRL		SSL	TRL
WR42	524500000	524600000	WR51	514500000	514600000	WR62	504500000	504600000
WR75	494500000	494600000	WR90	484500000	484600000	WR102	474501000	474601000
WR112	464501000	464601000	WR137	454501000	454601000	WR159	444501000	444601000
WR187	434501000	434601000	WR229	424501000	424601000	WR284	414502000	414602000
WR340	404502000	404602000	WR430	394503000	394603000	WR510	384503000	384603000
WR650	374503000	374603000	WR770	364503000	364603000	WR975	354503000	354603000
WR1150	344503000	344603000	WR1500	334503000	334603000	WR1800	324504000	324604000
WR2100	314504000	314604000	WR2300	304504000	304604000	* Other sizes from WR3650 and larger available by special order		

SSL Calibration Kit



Traditional style Calibration Kit where three impedance standards and one transmission standard are used to create a full two port calibration. Waveguide Calibration Kits use offset short circuits of $1/8$ lambda and $3/8$ lambda to represent the calibrated open and calibrated short circuit. Mega also provides two precision waveguide to Type-N female transitions and a precision sliding load to provide optimum performance over the full waveguide band.

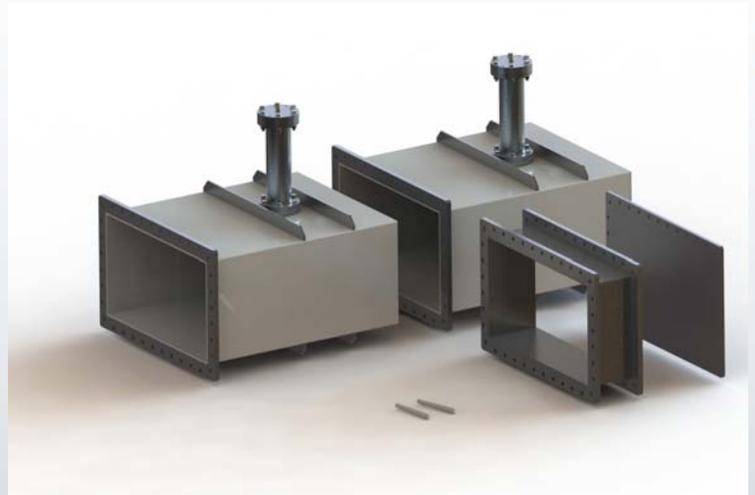
Kit Includes:

- Waveguide Transition to Type-N (x2)
- $1/8$ Lambda Waveguide Offset Short Circuit
- $3/8$ Lambda Waveguide Offset Short Circuit
- Waveguide Sliding Load
- Alignment Tool (x2)
- Calibration Coefficients Definition Sheet

Finish: RoHS Compliant Conversion Coating

Paint: Mega Blue

TRL Calibration Kit



Two port Calibration Kit where two precision waveguide to Type-N female transitions are used in conjunction with a flush short circuit and a precision $1/4$ Lambda waveguide section to provide a balanced response over the waveguide band.

Kit Includes:

- Waveguide Transition to Type-N (x2)
- $1/4$ Lambda Waveguide Section
- Shorting Plate
- Alignment Tool (x2)
- Calibration Coefficients Definition Sheet

Finish: RoHS Compliant Conversion Coating

Paint: Mega Blue