

# 14mm (MPC14) VNA CALIBRATION KITS

## 2450 SERIES

- Expanded Kits
- Connector Gage
- Torque Wrench
- Test Port Adapters

### Description

These calibration kits are designed for calibrating Vector Network Analyzers (VNAs) equipped with 3.5mm, 2.92mm or 7mm test set connectors and cables, which will be used in making error-corrected measurements of devices with 14mm connectors from 45 MHz to 8.5 GHz.

Each kit includes a full complement of calibration standards and accessories (shorts, opens, sliding and fixed loads, torque wrench, connector gages, 3.5mm to 14mm adapters, and a 14mm contact installation/extraction tool with spare contacts). The software (3-1/2" disk or cartridge) needed to easily load the calibration constants into your VNA is also included.

### Connector Description

The MPC14 precision 14mm connector is essentially equivalent to, and mating compatible with, GR900 type connectors. It features an improved hex knurl coupling nut and an improved center conductor inner contact (model 2481A). The coupling nut has a 1.00 inch hex for accurate tightening with a torque wrench, and the knurled knob provides a positive grip for finger tightening.

### Model Chart

Select the calibration kit number appropriate for your VNA test set and cable connector.

Model	VNA	Test Set and Cable Connector	Software Medium
2450F	Agilent 8510A/B	3.5mm	Cartridge
2450F14	Agilent 8510C	3.5mm	3-1/2" disk
2450F26	Agilent 8753C/D	7mm	3-1/2" disk <sup>2</sup>
2450W	Anritsu 360	2.92mm (K) <sup>1</sup>	3-1/2" disk
2450W20		7mm	
2450X	Anritsu 37000	2.92mm (K) <sup>1</sup>	3-1/2" disk
2450X20		7mm	

<sup>1</sup> The 3.5mm female (NMD3.5f) connector on the 14mm adapter mates directly with the NMD3.5m on Agilent 8513A, 8514B, and 8515A test sets, and the male K connector on Anritsu VNAs.

<sup>2</sup> An external disk drive is needed to use the 3-1/2" disk with the Agilent 8753C. Constants may also be manually keyed.



2450W01

### Equipment Provided:

- 1 ea. Fixed short, 14mm
- 1 ea. Open circuit, 14mm
- 2 ea. Fixed termination, 14mm
- 1 ea. Sliding termination, 14mm
- 1 ea. Adapter, 14mm to 3.5mm, female
- 1 ea. Adapter, 14mm to 3.5mm, male
- 1 ea. Adapter, 14mm to NMD3.5mm, female
- 1 ea. 14mm connector gage kit (push-on type)
- 1 ea. Torque wrench 1.00 hex, 12 in/lb
- 1 ea. Configuration cartridge or disk
- 1 ea. Contact installation/extraction tool
- 2 ea. 14mm contacts (spare parts)
- 1 ea. Instrument case
- 1 ea. Operating instructions

### Options

**Option 01:** Adds 2453A 30cm reference air line.

**Option 20:** Replaces the NMD and 3.5mm to 7mm adapters with two 14mm to 7mm adapters (2607A1).

**Option 21:** Option 01 and option 20 combined.

### Available Accessories (not provided)

**Offset Shorts:** Series 2449 can be used as verification or calibration standards.

**Precision Mismatches:** Series 2411 are resistive mismatches DC to 8.5 GHz in values up to 2:1 VSWR.

**Precision Two-Port Standard Set:** Model 2454.

 *Key literature – Maury data sheet 2Z-021.*

