

# PRECISION COAXIAL CALIBRATION KIT

## 7mm CONNECTOR, VECTOR NETWORK ANALYZER (VNA) — HP8753

### Description

The 2650P calibration kit with precision 7mm connectors is designed for calibrating Vector Network Analyzers (VNA) from 300 KHz to 6 GHz utilizing 7mm test ports and cables. With this kit, you can make error-corrected measurements of devices supplied with 7mm connectors using a VNA such as the HP8753 series.

This kit is provided with all required calibration hardware as listed below and is supplied in an attractive, foam-lined wooden instrument case. Operating instructions are provided with the calibration kit constants so they can be keyed in through the front panel.

- a) 1 each — Fixed short, 7mm, model 2615D3.
- b) 1 each — Open circuit, 7mm, model 2616D3. 1
- c) 2 each — Fixed termination, 7mm, model 2610F.
- d) 1 each — Instrument case.
- e) 1 each — Operating instructions.

### Connector Description

7mm connectors are precision air interface sexless connectors that are rated from DC to 18 GHz. They have an airline size of 0.1197 inner diameter and a 0.2756 outer diameter. There are basically two configurations; 1) GPC7 (or commonly referred to as APC7) which incorporates a bead support, and 2) LPC7A which is a beadless connector. Refer to Maury data sheets 5E-060 and 5E-061 for interface information.

### Accessories and Complementary Equipment Available

#### Connector Gages:

- a) Push on type — model A028.
- b) Thread on type — model A028D.

#### Torque Wrench:

Model 2698C1 (3/4 Hex. 12 in./lbs.).

1 This is an improved captivated contact and shielded open circuit.



### Specifications

#### Fixed Short: Model 2615D3

Frequency Range ..... DC - 18 GHz  
Reflection Coefficient ..... 0.995 minimum  
Impedance ..... 50 ohms nominal

#### Open Circuit: 1 Model 2616D3

Frequency Range ..... DC - 18 GHz  
Reflection Coefficient ..... 0.995 minimum  
Impedance ..... 50 ohms nominal

#### Fixed Termination: Model 2610F

Frequency Range ..... DC - 18 GHz  
VSWR ..... 1.05 max., DC - 2 GHz (52 dB min. R.L.)  
1.03 max., 2 - 8 GHz (36 dB min. R.L.)  
1.06 max., 8 - 18 GHz (30 dB min. R.L.)  
Impedance ..... 50 ohms nominal  
Power Handling ..... 1 watt CW

### Options

**Option 16:** Provided with a 3-1/2 data disk for the HP8753 series; this is a convenient and reliable method of entering the calibration kit constants.

**NOTE:** An HP9122C, single or dual, external disk drive may be required.