



# PRECISION VNA CALIBRATION KITS

## COAXIAL – TNC CONNECTORS

### Description

Maury precision TNC connector calibration kits described in this data sheet are designed for use with vector network analyzers (VNA) supplied with 3.5mm or 2.92mm test set connectors and cables<sup>1</sup>. With these kits, you can make error-corrected measurements of devices supplied with TNC connectors from 45 MHz to 18 GHz.

These kits are supplied with a full complement of calibration standards; shorts, opens, sliding and fixed loads. Rugged test port adapters and a complete set of phase matched TNC to 3.5mm adapters are also provided. All required calibration standards, adapters and accessories, along with the applicable software medium (cartridge or 3-1/2 disk as applicable containing the calibration constants) and operating instructions, are supplied in an attractive foam-lined wooden instrument case.

The table on the right shows the calibration kits that are available.



Model 8650M

Model	Network Analyzer	Software Medium <sup>2</sup>	Test Set and Cable Connectors
8650H	Agilent 8510A/B	Cartridge	3.5mm
8650J	Agilent 8510C	3-1/2 Disk	
8650M	Agilent 8720A/B/C	3-1/2 Disk <sup>3</sup>	
8650W	Anritsu 360	3-1/2 Disk	2.92mm (K) <sup>1</sup>
8650X	Anritsu 37000		

### Equipment Provided

The following items are provided in these kits:

- a) 1 each — Precision fixed termination, TNC female, model 332E
- b) 1 each — Precision fixed termination, TNC male, model 332F
- c) 1 each — Fixed short, TNC female, model 8615A
- d) 1 each — Fixed short, TNC male, model 8615B
- e) 1 each — Open circuit, TNC female, model 8609B
- f) 1 each — Open circuit, TNC male, model 8610B
- g) 1 each — Sliding termination, TNC female, model 452A1
- h) 1 each — Sliding termination, TNC male, model 452B1
- i) 1 each — Test port adapter, NMD3.5 female<sup>4</sup> to TNC female, model 8619A
- j) 1 each — Test port adapter, NMD3.5 female<sup>4</sup> to TNC male, model 8619B
- k) 1 each — Adapter, TNC female to 3.5mm female, model 8025A1<sup>5</sup>
- l) 1 each — Adapter, TNC male to 3.5mm female, model 8025B1<sup>5</sup>
- m) 1 each — Adapter, TNC female to 3.5mm male, model 8025C1<sup>5</sup>
- n) 1 each — Adapter, TNC male to 3.5mm male, model 8025D1<sup>5</sup>
- o) 1 each — Configuration medium (contains circuit constants)
- p) 1 each — Instrument case, 8650Z5
- q) 1 each — Operating instructions, 8650Z10





## Notes

- 1 3.5mm connectors mate directly to 2.92mm (K) connectors and the resulting junction is calibrated out and is not critical.
- 2 Software media models:
  - a) 8650S (Agilent 8510A/B)
  - b) 8650S2 (Agilent 8510C)
  - c) 8650L1 (Agilent 8720A/B/C)
  - d) 8650V (Anritsu 360)
  - e) 8650S29 (Anritsu 37000)
- 3 The 3-1/2 disk supplied contains the calibration constants for the Agilent 8720B only and an external, single or dual disk drive (Agilent 9122C) is required. When using an Agilent 8720A, the constants (supplied in the operating instructions) must be keyed in from the front panel.
- 4 The ruggedized 3.5mm female (NMD3.5) connector provided on the 8619A/B mates directly with the ruggedized male 3.5mm connectors (NMD3.5) on the Agilent 8513, Agilent 8515 and some Anritsu test sets, and the ruggedized 2.92mm connectors also used on some Anritsu test sets. The 8619A & B are not phase matched.
- 5 The 8025A1, B1, C1 and D1 adapters are phase matched so they can be readily interchanged.
- 6 The fixed loads are used for low frequency  $Z_0$  calibration up to 2 GHz and for broadband isolation calibration to 18 GHz.