

TNC VNA Calibration Kits

8650E Standard Kits

Features

- ▶ Precision TNC Connectors
- ▶ Sliding Load Calibration
- ▶ Broad VNA Coverage
- ▶ DC to 18 GHz



Description

These precision TNC calibration kits are designed for use with a broad range of vector network analyzers (VNAs) and are used to make error-corrected measurements of devices supplied with TNC connectors from DC to 18 GHz.

Each kit is supplied with a full complement of calibration standards (shorts, opens, sliding and fixed loads) and can be configured for any combination of VNA or test set/cable connectors. All required calibration standards, applicable adapters and accessories, along with a 3-1/2" disk (containing the VNA software) and operating instructions, come in an attractive foam-lined wood instrument case.

Connector Description

The TNC connectors (MPC/TNC) on the components in this kit are precision stainless steel connectors that mate with MIL-C-39012 and MIL-T-81490 connectors. They are low VSWR connectors rated from DC to 18 GHz. For interface specifications see Maury data sheet 5E-053.

Adapters Included in 7mm Sets (See page 113)

TEST PORT ADAPTER OPTION	QUANTITY	DESCRIPTION	MODEL
1	2	7mm to TNC female	2622A1
1	2	7mm to TNC male	2622B

Recommended Adapters

In-Series Adapters See page 119

- 232A11 TNC female to female
- 232B11 TNC male to male
- 232C11 TNC female to male

Components Included in 8650E Kits

QUANTITY	DESCRIPTION	MODEL
1	TNC female fixed offset short	8615A
1	TNC male fixed offset short	8615B
1	TNC female open	8609B
1	TNC male open	8610B
1	TNC female sliding termination	452A1
1	TNC male sliding termination	452B1
1	TNC female fixed termination	332E
1	TNC male fixed termination	332F
1	VNA software disk	—
1	Operating Instructions (manual)	—
1	Instrument case	—

All kits also include a set of user-specified adapters per the Option Finder below.

Adapters Included in 3.5mm Sets (Pages 108, 111)

TEST PORT ADAPTER OPTION	QUANTITY	DESCRIPTION	MODEL
3	1	NMD3.5mm female to TNC female	8619A
3	1	NMD3.5mm female to TNC male	8619B
3	1	3.5mm female to TNC female	8025A1
3	1	3.5mm female to TNC male	8025B1
3	1	3.5mm male to TNC female	8025C1
3	1	3.5mm male to TNC male	8025D1

Recommended Accessories

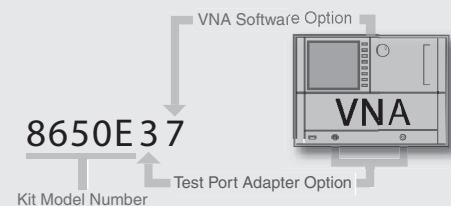
- 2698G1 9/16-in. hex torque wrench (12 in. lbs) See page 94
- A012A Connector gage kit (push-on type) See page 92

Ordering Options

To specify the test port adapter and VNA software options you need, simply add two digits to the end of the kit model number (as shown in the diagram at right). The first digit is the test port adapter option number, and the second is the VNA software option number (as found in the **Option Finder** below). The example in the diagram shows the combination of digits needed to order a 8650E kit configured with the adapters and software for use with an Agilent PNA that has 3.5mm test ports.

Option Finder

VNA TEST PORT TYPE	TEST PORT ADAPTER OPTIONS (see above)	VNA SOFTWARE OPTIONS					
		KITS W/O SOFTWARE OPTION 0	ROHDE & SCHWARZ ZV SERIES OPTION 1	AGILENT 8510C OPTION 4	AGILENT 8719/20/22 OPTION 5	AGILENT PNA SERIES OPTION 7	ANRITSU 37000 OPTION 9
7mm	1	10	11	14	15	17	19
3.5mm or 2.92mm (K) ¹	3	30	31	34	35	37	39



¹ 2.92mm (K) and 3.5mm connectors are fully mateable. The resulting junction is calibrated out and is not critical.

Key Literature: Maury data sheets 2Z-023H.

TNC VNA Calibration Kits

8650P Fixed Termination Kits

Features

- ▶ Fixed Load Calibration
- ▶ Precision TNC Connectors

Description

Maury's 8650P calibration kits are designed for calibrating vector network analyzers (VNAs) for measuring devices equipped with TNC connectors from DC to 18 GHz. Each kit is supplied with a full complement of calibration standards (shorts, opens, sliding and fixed loads) and can be configured for any VNA version. All required calibration standards, along with a 3-1/2" disk (containing the VNA software) and operating instructions, come in an attractive foam-lined wood instrument case.

Connector Description

The TNC connectors (MPC/TNC) on the components in this kit are precision stainless steel connectors that mate with MIL-C-39012 and MIL-T-81490 connectors. They are low VSWR connectors rated from DC to 18 GHz. For interface specifications see Maury data sheet 5E-053.

Available Kits

VNA MAKE AND MODEL	MAURY CAL KIT MODEL*
Rohde & Schwarz ZV Series	8650P11
Agilent ENA Series	8650P12
Agilent 8510C	8650P14
Agilent 8719/20/22	8650P15
Agilent PNA series	8650P17
Anritsu 37000	8650P19

* These fixed termination kits **DO NOT** include adapters. Adapters must be ordered separately.

Recommended Accessories

Torque wrench (See page 94)

2698G1 9/16-inch torque wrench (12 in. lbs)

Connector Gage Kits (See page 92)

A012A Connector gage kit (push-on type)



Components Included in 8650P Kits

QUANTITY	DESCRIPTION	MODEL
1	TNC female fixed offset short	8615A
1	TNC male fixed offset short	8615B
1	TNC female open	8609B
1	TNC male open	8610B
1	TNC female fixed termination	332E
1	TNC male fixed termination	332F
1	VNA software disk	—
1	Operating Instructions (manual)	—
1	Instrument case	—

Note: These fixed termination kits **DO NOT** include adapters. Adapters must be ordered separately (see **Recommended Adapters** below).

Recommended Adapters

In-Series Adapters (See page 119)

232A11	TNC female to TNC female adapter
232B11	TNC male to TNC male adapter
232C11	TNC female to TNC male adapter

Between-Series Adapters – 7mm to TNC (See page 113)

2622A1	7mm to TNC female adapter
2622B	7mm to TNC male adapter

Between-Series Adapters – Type N to TNC (See page 116)

8817A	Type N female to TNC female adapter
8817B	Type N female to TNC male adapter
8817C	Type N female to TNC female adapter
8817D	Type N male to TNC male adapter

Between-Series Adapters – 3.5mm to TNC (See page 111)

8025A1	3.5mm female to TNC female adapter
8025B1	3.5mm female to TNC male adapter
8025C1	3.5mm male to TNC female adapter
8025D1	3.5mm male to TNC male adapter

Ruggedized Test Port Adapters – NMD3.5mm to TNC (Page 108)

8619A	NMD3.5mm female to TNC female adapter
8619B	NMD3.5mm female to TNC male adapter

 Key Literature: Maury data sheet 2Z-068.