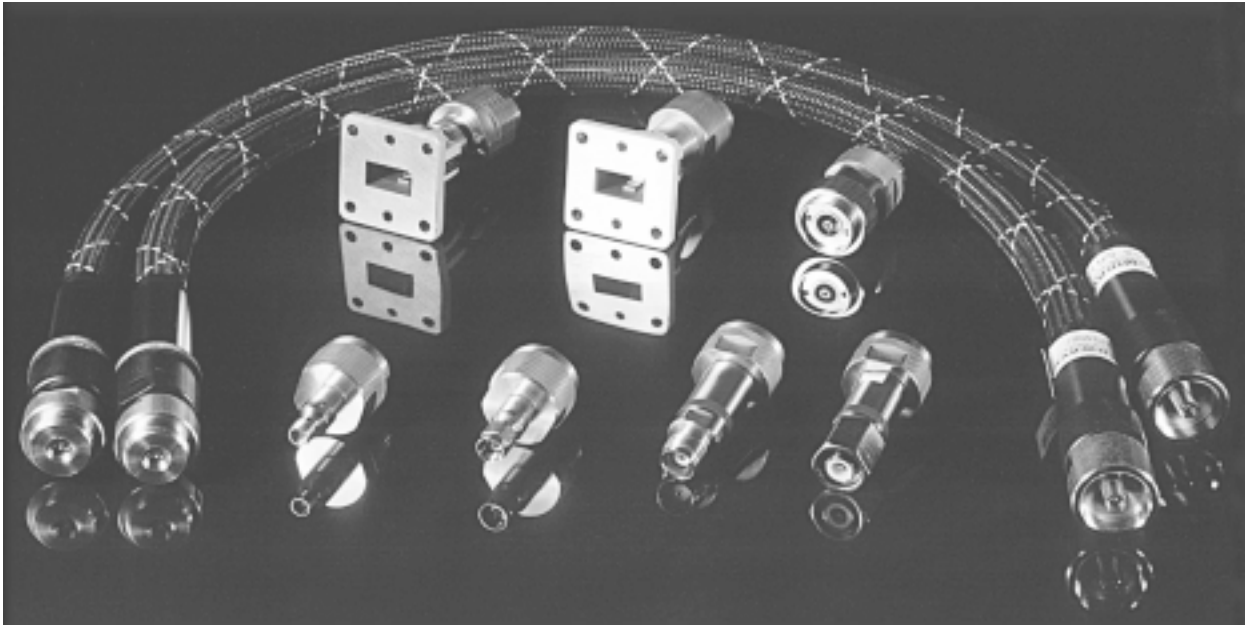


# TEST PORT CABLE /ADAPTER KITS



## Features

- VNA Applications
- Ruggedized Test Port Connectors
- 2.4mm Test Ports
- Coaxial Test Port to Waveguide Adapters

## General

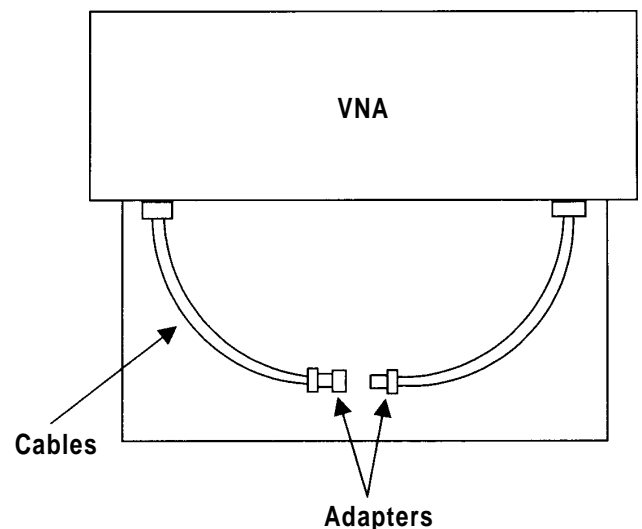
The 8946 cable and adapter sets are specifically configured to be versatile and cost effective. The cable assemblies extend the test ports of HP and Anritsu network analyzers using rugged test port connectors on both ends of the cables. The adapters, also equipped with rugged test ports connectors, allow the user to change connector types. This means that rather than having to purchase several different cables with different connectors, only one set of cables is necessary with additional adapters.

## Description

The cables come in standard lengths of 25 inches and 38 inches with a rugged female test port connector on one end and a rugged male test port on the other. They are extremely flexible while still maintaining

excellent phase and amplitude stability. The adapters have rugged female test ports and adapt to many popular connector types such as; 3.5mm, 7mm, N and 2.92mm.

Kits can be purchased with one or two cables and up to three adapter sets. Individual adapters can also be purchased. Kits with more than three adapter sets can be configured to the customer's specifications.





## 8946 Series 2.4mm Cable and Adapter Sets

Model	Description
8946A25 ( * ) ( * ) ( * )	1 cable, 2.4mm, 25 inches, plus adapters
8946B25 ( * ) ( * ) ( * )	2 cables, 2.4mm, 25 inches, plus adapters
8946A38 ( * ) ( * ) ( * )	1 cable, 2.4mm, 38 inches, plus adapters
8946B38 ( * ) ( * ) ( * )	2 cables, 2.4mm, 38 inches, plus adapters

( \* ) Insert adapter option from table below.

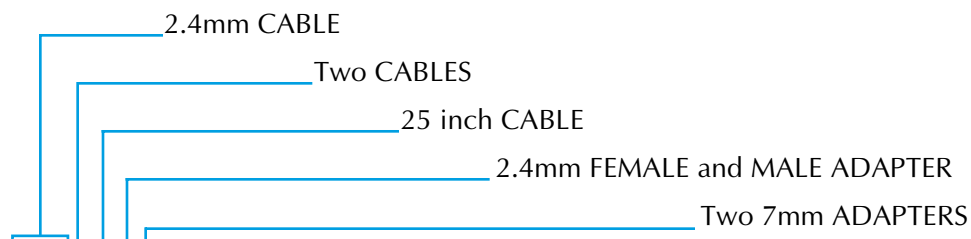
### Adapters Available

Adapter Model	Connectors		Quantity	Standard Adapter Options
7909A1	NMD 2.4 female	2.4mm female	1	A
7909A2	NMD 2.4 female	2.4mm male	1	
7909B1	NMD 2.4 female	3.5mm female	1	B
7909B2	NMD 2.4 female	3.5mm male	1	
7909C	NMD 2.4 female	APC7	2	C
7909D1	NMD 2.4 female	Precision N female	1	D
7909D2	NMD 2.4 female	Precision N male	1	
7909F1	NMD 2.4 female	2.92mm (K) female	1	E
7909F2	NMD 2.4 female	2.92mm (K) male	1	

### Optional Adapters

- 8909F NMD 3.5mm (f) to NMD 3.5mm (m)
- 7909H NMD 2.4mm (f) to NMD 3.5mm (m)

### Ordering Information



Model number example -----> **8946B25AC( )**

**INSERT ONE, TWO OR THREE ADAPTER OPTIONS**

## 25" Cable Length Specifications

### Model 8946C25

- Frequency Range ..... 50 GHz
- Insertion Loss, dB
  - Typical .....  $0.05 + 0.30(f) + 0.010(f)$
  - Guarantee .....  $0.25 + 0.35(f) + 0.015(f)$
- Return Loss, dB ..... 15
- Overall Phase Stability, degrees
  - Typical .....  $0.05(f)$
  - Guarantee .....  $0.5 + 0.08(f)$
- Overall Amplitude Stability, dB
  - Typical .....  $\leq 0.03$
  - Guarantee .....  $\leq 0.08$
- Return Loss Stability, dB .....  $\geq 40$
- Outer Diameter (inches, nom.) ..... 0.6
- Minimum Bend Radius (inches, nom.) ..... 2.5

## 38" Cable Length Specifications

### Model 8946C38

- Frequency Range ..... 50 GHz
- Insertion Loss, dB
  - Typical .....  $0.044 + 0.47(f) + 0.014(f)$
  - Guarantee .....  $0.290 + 0.51(f) + 0.017(f)$
- Return Loss, dB ..... 15
- Overall Phase Stability, degrees
  - Typical .....  $0.10(f)$
  - Guarantee .....  $0.5 + 0.17(f)$
- Overall Amplitude Stability, dB
  - Typical .....  $\leq 0.05$
  - Guarantee .....  $\leq 0.15$
- Return Loss Stability, dB .....  $\geq 40$
- Outer Diameter (inches, nom.) ..... 0.6
- Minimum Bend Radius (inches, nom.) ..... 2.5



## Coaxial Adapter Specifications

Model	To	From	Frequency Range (GHz)	Maximum VSWR (GHz)	Length (inches)
7909A1	NMD 2.4 female	2.4mm female	DC — 50.0	DC — 26.5 1.08	1.48
7909A2	NMD 2.4 female	2.4mm male		26.5 — 40.0 1.12	
				40.0 — 50.0 1.15	1.51
7909B1	NMD 2.4 female	3.5mm female	DC — 34.0	DC — 10.0 1.06	1.26
7909B2	NMD 2.4 female	3.5mm male		10.0 — 20.0 1.10	
				20.0 — 34.0 1.12	
7909C	NMD2.4 female	APC7	DC — 18.0	DC — 4.0 1.05	2.16
				4.0 — 12.0 1.07	
				12.0 — 18.0 1.10	
7909D1	NMD 2.4 female	Precision N female	DC — 18.0	DC — 4.0 1.08	1.80
7909D2	NMD 2.4 female	Precision N male		4.0 — 12.0 1.12	
				12.0 — 18.0 1.12	1.84
7909F1	NMD 2.4 female	2.92mm (K) female	DC — 40.0	DC — 20.0 1.10	1.44
7909F2	NMD 2.4 female	2.92mm (K) male		20.0 — 40.0 1.16	1.48
7909H	NMD 2.4 female	NMD 3.5 male	DC — 34.0	DC — 10.0 1.06	1.49
				10.0 — 20.0 1.10	
				20.0 — 34.0 1.14	