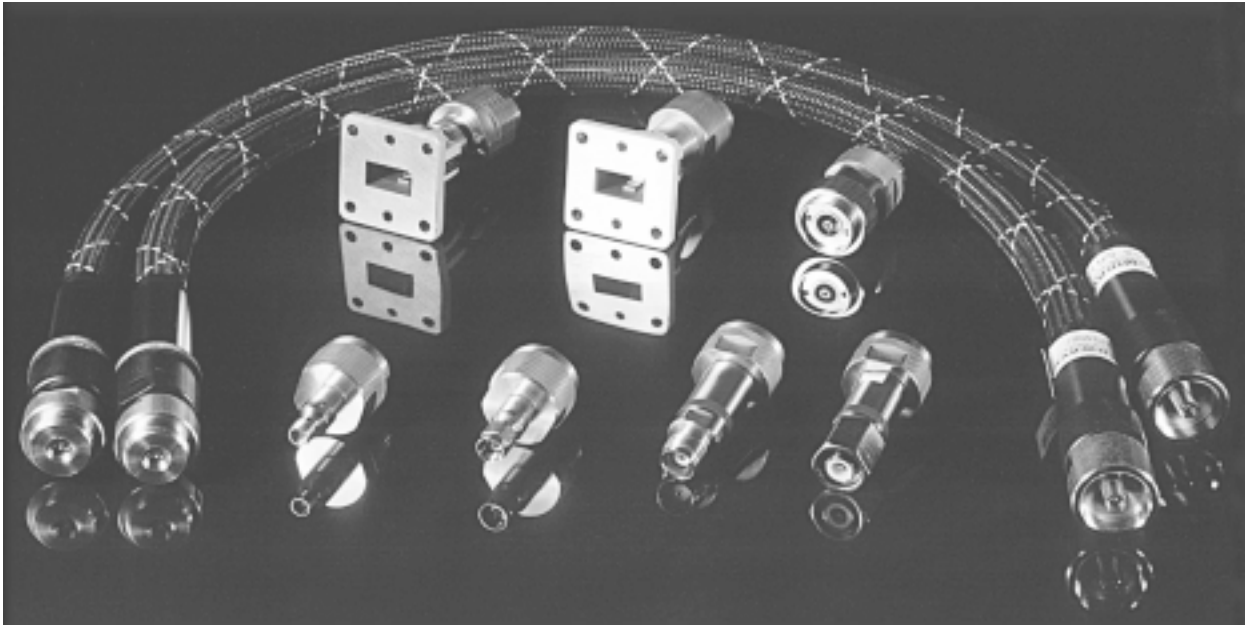


# TEST PORT CABLE /ADAPTER KITS



## Features

- VNA Applications
- Ruggedized Test Port Connectors
- 3.5mm and 2.92mm Test Ports
- Coaxial Test Port to Waveguide Adapters

## General

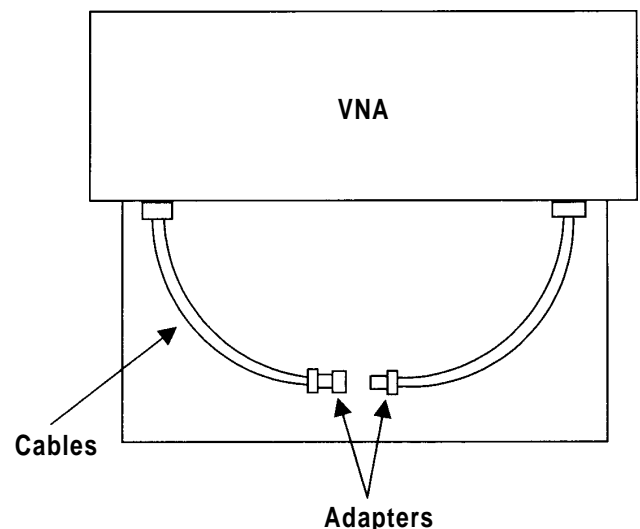
The 8944 cable and adapter sets are specifically configured to be versatile and cost effective. The cable assemblies extend the test ports of HP and Anritsu network analyzers using rugged test port connectors on both ends of the cables. The adapters, also equipped with rugged test ports connectors, allow 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 most popular connector types such as; 3.5mm, 7mm, N, TNC and 2.92mm. Waveguide to 3.5mm test port adapters are available in waveguide bands WR430 to WR42. A WR28 to 2.92mm test port adapter is also available.

Sets 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.





## 8944 Series 3.5mm Cable and Adapter Sets

Model	Description
8944A25 ( * ) ( * ) ( * )	1 cable, 3.5mm, 25 inches, plus adapters
8944B25 ( * ) ( * ) ( * )	2 cables, 3.5mm, 25 inches, plus adapters
8944A38 ( * ) ( * ) ( * )	1 cable, 3.5mm, 38 inches, plus adapters
8944B38 ( * ) ( * ) ( * )	2 cables, 3.5mm, 38 inches, plus adapters

( \* ) Insert adapter option from table below.

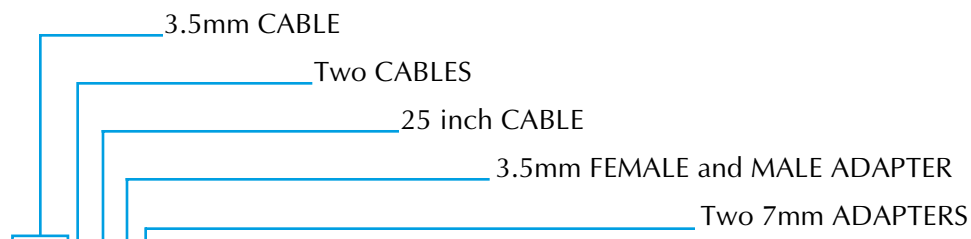
### Adapters Available

Adapter Model	Connectors	Quantity	Standard Adapter Options
8009A	NMD 3.5mm (f) 3.5mm (f)	1	A
8009B	NMD 3.5mm (f) 3.5mm (m)	1	
8009G	NMD 3.5mm (f) 7mm	2	B
8829A	NMD 3.5mm (f) N (m)	1	C
8829B	NMD 3.5mm (f) N (f)	1	
8619A	NMD 3.5mm (f) TNC (f)	1	D
8619B	NMD 3.5mm (f) TNC (m)	1	
2433A1	NMD 3.5mm (f) 14mm	2	E
H230K1	NMD 3.5mm (f) WR112	2	F
X230K1	NMD 3.5mm (f) WR90	2	G
M230K1	NMD 3.5mm (f) WR75	2	H
P230K1	NMD 3.5mm (f) WR62	2	J
N230K3	NMD 3.5mm (f) WR51	2	K
K230K6	NMD 3.5mm (f) WR42	2	L

### Optional Adapters

8909F NMD 3.5mm (f) to NMD 3.5mm (m)  
 7909H NMD 2.4mm (f) to NMD 3.5mm (m)  
 U233E NMD 2.92mm (f) to WR28

### Ordering Information



Model number example -----> **8944B25AB( )**

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

## 25" Cable Length Specifications

### Model 8944C25

Frequency Range ..... 26.5 GHz  
 Insertion Loss, dB

Typical .....  $0.05 + 0.30(f)^{1/2} + 0.010(f)$

Guarantee .....  $0.25 + 0.35(f)^{1/2} + 0.015(f)$

Return Loss, dB ..... 18

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 8944C38

Frequency Range ..... 26.5 GHz

Insertion Loss, dB

Typical .....  $0.044 + 0.47(f)^{1/2} + 0.014(f)$

Guarantee .....  $0.290 + 0.51(f)^{1/2} + 0.017(f)$

Return Loss, dB ..... 18

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)
8009A	NMD 3.5mm (f)	3.5mm (f)	DC — 26.5	DC — 18.0 1.08	1.45
8009B	NMD 3.5mm (f)	3.5mm (m)		18.0 — 26.5 1.12	1.49
8009G	NMD 3.5mm (f)	APC7	DC — 18.0	1.018 + 0.003f	2.18
8009F	NMD 3.5mm (f)	NMD 3.5mm (m)	DC — 26.5	DC — 18.0 1.08	1.49
				18.0 — 26.5 1.12	
8829A	NMD 3.5mm (f)	Precision N (f)	DC — 18.0	DC — 6.0 1.04	2.04
8829B	NMD 3.5mm (f)	Precision N (m)		6.0 — 18.0 1.08	2.20
8619A	NMD 3.5mm (f)	Precision TNC (f)	DC — 18.0	DC — 3.5 1.06	2.05
8619B	NMD 3.5mm (f)	Precision TNC (m)		3.5 — 7.0 1.10	2.00
				7.0 — 18.0 1.16	
2433A1	NMD 3.5mm (f)	MPC14 (GR900 equiv.)	DC — 8.5	1.01 + 0.008f	2.32
7909H	NMD 2.4mm (f)	NMD 3.5mm (m)	DC — 34.0	DC — 10.0 1.06	1.49
				10.0 — 20.0 1.10	
				20.0 — 34.0 1.14	

### Waveguide Adapter Specifications

Model	Frequency Range (GHz)	Maximum VSWR (GHz)	Waveguide Size (EIA)	Equivalent Flange	Approximate Length (inches)
R230K1	1.7 — 2.6	1.10	WR430	CPR430F	6.19
S230K1	2.6 — 3.95	1.10	WR284	UG584/U	4.13
E230K1	3.3 — 4.9	1.10	WR229	CPR229F	3.88
G230K1	3.95 — 5.85	1.10	WR187	UG149/U	3.88
F230K1	4.9 — 7.05	1.10	WR159	CPR159F	3.40
C230K1	5.85 — 8.20	1.10	WR137	UG344/U	3.13
H230K1	7.05 — 10.0	1.10	WR112	UG51/U	2.98
X230K1	8.20 — 12.4	1.10	WR90	UG39/U	2.73
M230K1	10.0 — 15.0	1.10	WR75	MPF75	2.63
P230K1	12.4 — 18.0	1.10	WR62	UG419/U	2.38
N230K3	15.0 — 22.0	1.20	WR51	MPF51	2.00
K230K6	18.0 — 26.5	1.15	WR42	UG595/U	1.80
U233E <sup>1</sup>	26.5 — 40.0	1.30	WR28	UG599/U	1.80

<sup>1</sup> Uses a ruggedized 2.92mm connector.