

## 50 GHz Test Port Extension Cables

Spanawave's test port extension cables are the perfect alternative to over-priced models from other manufacturers. These test cables provide the utmost precision in vector measurements in the lab and during calibrations. Besides the electrical performance, these VNA cables are rugged and feature a lightweight armor to insure consistent performance over time. A wide variety of connectors are available including the precision "NMD" or "port ruggedized" connectors, which mate directly to the VNA port. Custom lengths and configurations are available. Please contact us for application help and pricing.



ELECTRICAL DATA	
Max Frequency:	50 GHz
Impedance:	50 Ω Nominal
Propagation Velocity:	80% Nominal
Time Delay:	1.27 ns/ft (4.167 ns/m)
Shielding Effectiveness:	-100 dB minimum (cable only)
Dielectric Withstanding Voltage:	1200 VRMS
Capacitance:	25.4 pF/ft (83.3 pF/m)

MECHANICAL DATA	
Finished Outer Diameter:	0.625 in (1.588 cm)
Static Bend Radius:	4.0 in (10.16 cm)
Weight with Standard Jacket/Armor:	0.18 lbs/ft (0.26 kg/m)
Max Assembly Length:	5 ft (1.52 m)
Crush Resistance:	250 lbs/linear in (44.6 kg/linear cm)
Operating Temperature Range:	-76 to 248° F (-60 to 120° C)

CABLE CONSTRUCTION	
Inner Conductor:	Solid Ag-plated Cu
Dielectric:	Foamed FEP
Standard Finish:	Metal Braid/ Metal Conduit

PART NO.	MAX. FREQ. (GHz)	LENGTH in. (cm)	TEST PORT CONNECTOR	DUT CONNECTOR	PRICE *
C5133C-FLEX	50	32 (81)	2.4mm (f) NMD	2.4mm (f)	\$1,650.00
C5133D-FLEX (Set of 2)	50	21 (53)	2.4mm (f) NMD	2.4mm (f)	\$3,410.00
	50	21 (53)	2.4mm (f) NMD	2.4mm (m)	
C5133E	50	38 (97)	2.4mm (f) NMD	2.4mm (f)	\$1,835.00
C5133F (Set of 2)	50	25 (63)	2.4mm (f) NMD	2.4mm (f)	\$3,460.00
	50	25 (63)	2.4mm (f) NMD	2.4mm (m)	
C5133G-FLEX	50	21 (53)	2.4mm (f) NMD	2.4mm (m)	\$1,650.00
C5133H	50	25 (63)	2.4mm (f) NMD	2.4mm (m)	\$1,650.00

\* Prices are for US Customers only. International prices may differ based on region.

FREQUENCY		ATTENUATION		CONN LOSS dB	VSWR	
BAND	GHz	dB/ft	dB/m			
UHF	0.3	0.106	0.346	0.006	1.10	
	0.5	0.137	0.450	0.009		
	0.8	0.175	0.574	0.012		
L	1.0	0.197	0.645	0.014	1.15	
S	2.0	0.283	0.930	0.024		
	2.4	0.312	1.024	0.027		
	3.0	0.352	1.155	0.032		
C	4.0	0.411	1.349	0.040		1.20
	6.0	0.513	1.684	0.055		
X	8.0	0.602	1.976	0.070	1.25	
	10.0	0.683	2.240	0.084	1.30	
	12.4	0.772	2.532	0.101		
Ku	15.0	0.861	2.825	0.118	1.35	
	18.0	0.957	3.140	0.139		
K	20.0	1.018	3.340	0.152		1.40
	22.0	1.077	3.533	0.165		
	24.0	1.134	3.720	0.178		
Ka	26.5	1.203	3.946	0.194	1.45	
	28.0	1.243	4.079	0.204		
	30.0	1.296	4.252	0.217		
	32.0	1.347	4.421	0.230		
	34.0	1.398	4.587	0.243		
V	36.0	1.448	4.749	0.256	1.50	
	40.0	1.544	5.066	0.281		
	45.0	1.661	5.449	0.313		
	50.0	1.774	5.819	0.344		

