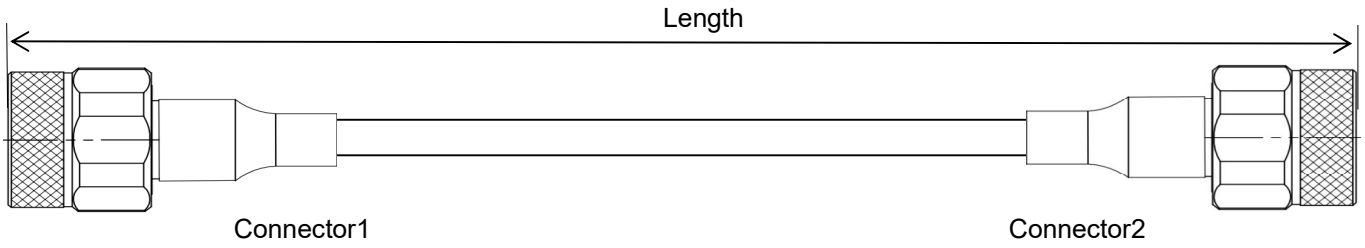
Ultra-Flexible Phase Stable Low Loss Cable Assembly, Using UF800

DC-18 GHz, N Male to N Male **UF800-NMNM-L(L:Length)**

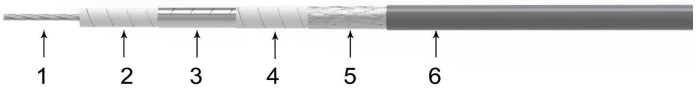


· Length can be in meter or in inch etc, e.g, UF520-NMNM-1M. Standard length tolerance: ±1.5%. Custom lengths and other connector types available.
· Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

Configuration

Connector 1	N male	**Connector 2**	N male
Body	Passivated stainless steel	Body	Passivated stainless steel
Center Contact	Gold plated brass	Center Contact	Gold plated brass
Cable Type	UF800		

Cable Construction



No.	Construction	Size (mm)	Materials
1	Center Conductor	2.30	Stranded silver plated copper
2	Dielectric	6.00	Low density PTFE
3	Outer Conductor	6.33	Silver plated copper strip wrappin
4	Interlayer	6.60	PTFE
5	Outer Shield	7.05	Silver plated copper wire braiding
6	Jacket	7.70	FEP

Electrical

Frequency	DC-18 GHz
Impedance	50 Ω
VSWR Max	1.3
IL Max(1 meter assembly)	1.25dB
*Mechanical Phase Stability	<±5º
Amplitude Stability vs Shaking	<±0.15dB

Mechanical & Environmental

Min.Bending Radius Static	40mm
Min. Bending Radius Repeated	80mm
Velocity of Propagation	124g/m
Temperature(Operation)	-50～105 ºC
Temperature(Storage)	-60～105 ºC

* Wrapped 360˚ around a 80mm radius mandrel.

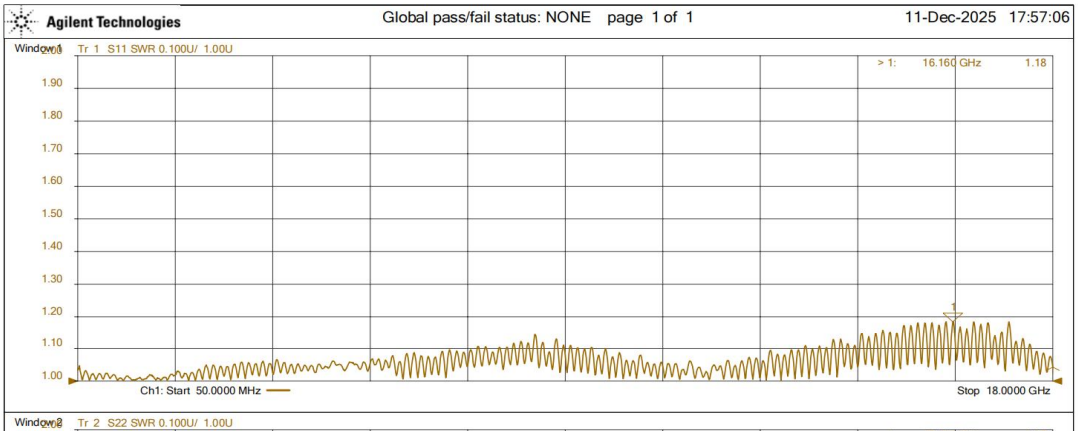
Attenuation(Typical@25℃&VSWR=1.0) & Power(VSWR=1.0; 40℃; Sea level)

Frequency MHz	300	1000	2000	3000	6000	8000	10000	12000	14000	16000	18000
dB/100 Meter	9.8	18.1	25.9	31.9	45.8	53.4	60.1	66.2	71.9	77.3	82.4
Avg.Power kW	3.340	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Attenuation at any frequency＝[0.561347×SQRT(FMHz)]+[0.000393×FMHz]

Notes:
1) The above attenuation refers to typical loss of cable only, max loss is 1.1 times of typical loss. Insertion loss per connector is estimated as 0.03dB x SQRT Freq(GHz).
2) Power handling values are calculated based on cable properties. Power handling will vary based on connector type and actual VSWR of the cable assembly.

Typical Test Data (UF800-NMNM-1M)



Channel Settings

Channel	Sweep Type	Points	Start (MHz)	Stop (GHz)	IF BW (kHz)	Sweep Time (s)	Pow 1 (dBm)	Pow 2 (dBm)
1	LinFreq	1601	50.000000	18.000000	10.000000	1.000000	-15.000000	-15.000000

Trace Attributes

Window	ID	Trace	Channel	Correction	Options	Marker	Position	Response
1	1	S11	1	C 2-Port		1	16171.344 MHz	1.1847
2	1	S22	1	C 2-Port		1	17192.25 MHz	1.1734
3	1	S21	1	C 2-Port		1	18000 MHz	-0.82873 dB