RFLOGY
TOMORROW DISCOVERED

Flexible RF Cables & Assemblies

NA830

Ultra Low Loss & Phase Stable

Features:
* Low Insertion Loss
* High Phase Stability
* High Power
* Low PIM

Applications:
* Phased-array Radar
* Satellite Communication
* Avionics

Electrical

Frequency:	DC~18GHz
Cut-off Frequency:	18GHz
Impedance:	50Ω
Velocity of Propagation:	83%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	2500V DC
PIM:	-155dBc
Phase Stability:	750PPM@-55℃~+85℃ max.

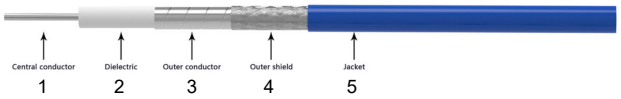
Mechanical

Bend Radius (installation):	41.0mm
Bend Radius (repeated):	83.0mm
Weight:	162g/m

Environmental

Temperature:	-55~+165℃

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	2.44	Silver-plated copper
2	Dielectric	6.50	Low density PTFE
3	Inner Shield	6.90	Silver-plated copper tape
4	Outer Shield	7.65	Silver-plated copper braid
5	Jacket	8.30	PFA

Attenuation & Power Handling

Frequency (GHz)	1	2	4	6	8	10	12.4	16	18
Attenuation[*1] (dB/100m)	13.3	18.9	27.1	33.6	39.1	44.1	49.5	56.9	60.6
Average Power[*2] (W)	1894	1326	925	747	641	569	507	442	414

[1] VSWR:1.0; Ambient: +25℃ (77℉)
[2] VSWR:1.0; Ambient: +40℃ (104℉); Sea level
Calcuate Cable Attenuation: Attenuation (dB/100m) = $0.408997 * \sqrt{F\ (MHz)} + 0.000320 * F\ (MHz)$
Calcuate Connector Attenuation: Attenuation (dB) = $0.03 * \sqrt{F\ (GHz)}$

How To Order

NA830-X-Y-Z

X: Frequency in GHz
Y: Connector type
Z: Length in meters

Examples:
To order a NA830 cable assembly, DC-18GHz, N male to SMA female, 0.5 meter, specify NA830-18-SFN-0.5.

Connector naming rules:
S - SMA (18GHz, VSWR 1.25)
N - N (18GHz, VSWR 1.25)
T - TNC (18GHz, VSWR 1.25)

Female Connector - Add ‘F’ after connector name
Right Angle - Add ‘R’ after connector name (VSWR increase 0.1)

Mating Connector

NCS-MG-A830-1
SMA male, Stainless steel

NCN-MG-A830-1
N male, Stainless steel