

# NR1500

## Low Loss

Features:  
 \* Low Insertion Loss  
 \* High Weatherability  
 \* UV Resistant

Applications:  
 \* Wireless Communication  
 \* Microwave Interconnect

### Electrical

Frequency:	DC~5.8GHz
Cut-off Frequency:	10.3GHz
Impedance:	50Ω
Velocity of Propagation:	87%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	4000V DC

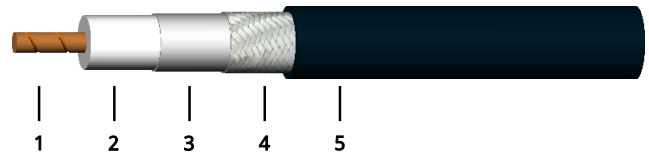
### Mechanical

Bend Radius (installation):	38.0mm
Bend Radius (repeated):	152.0mm
Weight:	200g/m

### Environmental

Temperature:	-40~+85°C
Outdoor Life:	20 or 10 years

### Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	4.47	Copper-clad aluminum
2	Dielectric	11.56	Foam PE
3	Outer Conductor	11.72	Double-edged aluminum foil
4	Outer Shield	12.45	Tin-plated copper braid
5	Jacket	15.00	PE or PVC

### Attenuation & Power Handling

	0.03	0.05	0.15	0.22	0.45	0.9	1.5	1.8	2	2.5	5.8
Frequency (GHz)											
Attenuation*1 (dB/100m)	1.4	1.8	3.2	3.9	5.7	8.4	11.1	12.3	13.0	14.8	24.2
Average Power*2 (W)	5510	4240	2410	1970	1350	930	700	630	590	520	320

[1] VSWR:1.0; Ambient: +25°C (77°F)

[2] VSWR:1.0; Ambient: +40°C (104°F); Sea level

Calculate Cable Attenuation: Attenuation (dB/100m) = 0.2526247 \* √F (MHz) + 0.0008530 \* F (MHz)

Calculate Connector Attenuation: Attenuation (dB) = 0.03 \* √F (GHz)

### How To Order

#### NR1500-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a NR1500 cable assembly, DC-5.8GHz, 7/16 DIN male, 1.5 meters, specify NR1500-5.8-77-1.5.

Connector naming rules:

7 - 7/16 DIN (L29) (6GHz, VSWR 1.35)

Female Connector - Add 'F' after connector name

Right Angle - Add 'R' after connector name (VSWR increase 0.1)

**Mating Connector**

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**NCS-MCB-R1500-1**

SMA male, Crimping type,  
Ternary alloy plated brass

**NCS-MRCB-R1500-1**

SMA male, Right angle,  
Crimping type, Ternary  
alloy plated brass & Nickel  
plated brass

**NCN-MCB-R1500-1**

N male, Crimping type,  
Ternary alloy plated brass

**NCN-MRCB-R1500-1**

N male, Right angle,  
Crimping type, Nickel  
plated brass

