

# QG500

## Low Loss

**Features:**

\* Low Insertion Loss

**Applications:**

 \* Telecom  
 \* Interconnection between equipment

**Electrical**

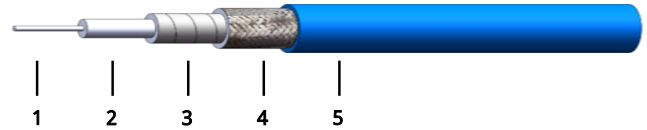
Frequency:	DC~18GHz
Cut-off Frequency:	28GHz
Impedance:	50Ω
Velocity of Propagation:	76%
Shielding Effectiveness:	70dB min.
Voltage Withstand:	1500V DC

**Mechanical**

Bend Radius (installation):	25.0mm
Bend Radius (repeated):	51.0mm
Weight:	60g/m

**Environmental**

Temperature: -55~+125°C

**Construction**


No.	Name	Size (mm)	Material
1	Inner Conductor	1.45	Silver-plated copper
2	Dielectric	4.20	Low density PTFE
3	Inner Shield	4.32	Self-adhesive aluminum foil
4	Outer Shield	4.65	Silver-plated copper braid
5	Jacket	5.10	FEP

**Attenuation & Power Handling**

Frequency (GHz)	0.3	0.5	1	3	6	10	12.4	18
Attenuation*1 (dB/100m)	12.8	16.6	23.8	42.6	62.1	82.7	93.4	115.9
Average Power*2 (W)	1428	1098	766	428	293	220	195	157

[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) =  $0.718000 \times \sqrt{F} \text{ (MHz)} + 0.001088 \times F \text{ (MHz)}$ 

 Calculate Connector Attenuation: Attenuation (dB) =  $0.03 \times \sqrt{F} \text{ (GHz)}$ 
**How To Order**
**QG500-X-Y-Z**

X: Frequency in GHz

Y: Connector type

Z: Length in meters

**Examples:**

To order a QG500 cable assembly, DC-18GHz, N male to N female, 0.5 meter, specify QG500-18-NNF-0.5.

**Connector naming rules:**

3 - 3.5mm (18GHz, VSWR 1.2)

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**

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**QCK-MG-A500-1**

2.92mm male, Stainless steel

**QC3-MG-A500-2**

3.5mm male, Stainless steel

**QC3-FG-A500-2**

3.5mm female, Stainless steel

**QCS-MG-A500-2**

3.5mm male, Stainless steel

**QCS-MRG-A500-2**

SMA male, Right angle, Stainless steel

**QCS-FG-A500-2**

SMA female, Stainless steel

**QCS-FHG-A500-1**

SMA female, Bulk head, Stainless steel

**QCN-MG-A500-4**

N male, Stainless steel

**QCN-MRG-A500-1**

N male, Right angle, Stainless steel

**QCN-FG-A500-1**

N female, Stainless steel

**QCT-MG-A500-2**

TNC male, Stainless steel