

QY1000

Outdoor Use, Low Loss, Phase Stable

Features:

- * Low Insertion Loss
- * High Weatherability
- * UV Resistant

Applications:

- * Wireless Base Station
- * Satellite Communication
- * Maritime Communication
- * Outdoor Interconnection

Electrical

Frequency:	DC~10GHz
Cut-off Frequency:	15GHz
Impedance:	50Ω
Velocity of Propagation:	76%
Shielding Effectiveness:	70dB min.
Voltage Withstand:	3000V DC

Mechanical

Bend Radius (installation):	50.0mm
Bend Radius (repeated):	100.0mm
Weight:	190g/m

Environmental

Temperature:	-55~+85°C
Outdoor Life:	20 years

Construction


No.	Name	Size (mm)	Material
1	Inner Conductor	2.44	Silver-plated copper
2	Dielectric	7.24	Low density PTFE
3	Inner Shield	7.48	Silver-plated copper tape
4	Interlayer	7.61	Aluminum tape
5	Outer Shield	8.19	Silver-plated copper braid
6	Jacket	10.15	PUR

Attenuation & Power Handling

Frequency (GHz)	0.1	0.3	0.5	1	3	5	6	8	10
Attenuation*1 (dB/100m)	4.5	7.9	10.3	14.7	26.2	34.5	38.2	44.7	50.6
Average Power*2 (W)	3590	2053	1580	1104	619	470	425	363	321

[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) = $0.446080 * \sqrt{F} \text{ (MHz)} + 0.000600 * F \text{ (MHz)}$

Calculate Connector Attenuation: Attenuation (dB) = $0.03 * \sqrt{F} \text{ (GHz)}$

How To Order
QY1000-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a QY1000 cable assembly, DC-10GHz, N male to N female, 1.5 meters, specify QY1000-10-NNF-1.5.

Connector naming rules:

N - N (10GHz, VSWR 1.2)

T - TNC (10GHz, VSWR 1.2)

Female Connector - Add 'F' after connector name

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