Qualwave

Ultra-Flexible RF Cables & Assemblies

QR1000U

Low Loss, Ultra Flexible

Features:
* Low Insertion Loss
* High Weatherability
* UV Resistant
* Ultra Flexible

Applications:
* Wireless Communication
* Microwave Interconnect

Electrical

Frequency:	DC~5.8GHz
Cut-off Frequency:	16.2GHz
Impedance:	50Ω
Velocity of Propagation:	85%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	2500V DC

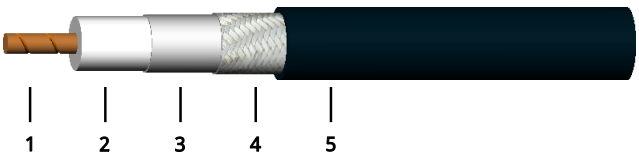
Mechanical

Bend Radius (installation):	25.0mm
Bend Radius (repeated):	100.0mm
Weight:	130g/m

Environmental

Temperature:	-40~+85℃
Outdoor Life:	20 years

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	2.74	Stranded Copper
2	Dielectric	7.24	Foam PE
3	Outer Conductor	7.39	Double-edged aluminum foil
4	Outer Shield	8.13	Tin-plated copper braid
5	Jacket	10.30	TPE

Attenuation & Power Handling

Frequency (GHz)	0.03	0.05	0.15	0.22	0.45	0.9	1.5	1.8	2	2.5	5.8
Attenuation[*1] (dB/100m)	2.7	3.5	6.1	7.4	10.7	15.4	20.3	22.4	23.7	26.7	42.8
Average Power[*2] (W)	2770	2140	1220	1000	690	480	360	330	310	280	170

[1] VSWR:1.0; Ambient: +25℃ (77℉)
[2] VSWR:1.0; Ambient: +40℃ (104℉); Sea level
Calcuate Cable Attenuation: Attenuation (dB/100m) = $0.4822835 * \sqrt{F\ (MHz)} + 0.0010499 * F\ (MHz)$
Calcuate Connector Attenuation: Attenuation (dB) = $0.03 * \sqrt{F\ (GHz)}$

How To Order

QR1000U-X-Y-Z
X: Frequency in GHz
Y: Connector type
Z: Length in meters

Examples:
To order a QR1000U cable assembly, DC-5.8GHz, N male, 1.5 meters, specify QR1000U-5.8-NN-1.5.

Connector naming rules:
N - N (6GHz, VSWR 1.35)
T - TNC (6GHz, VSWR 1.35)

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

Mating Connector

QCS-MCB-R1000-1
SMA male, Crimping type, Ternary alloy plated brass & Nickel plated brass

QCS-MRCB-R1000-1
SMA male, Right angle, Crimping type, Ternary alloy plated brass & Nickel plated brass

QCN-MCB-R1000-1
N male, Crimping type, Brass

QCN-FCB-R1000-1
N female, Crimping type, Ternary alloy plated brass