Qualwave

Ultra-Flexible RF Cables & Assemblies

QR1500U

Low Loss, Ultra Flexible

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

Applications:
* Wireless Communication
* Microwave Interconnect

Electrical

Frequency:	DC~2GHz
Cut-off Frequency:	10GHz
Impedance:	50Ω
Velocity of Propagation:	87%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	4000V DC

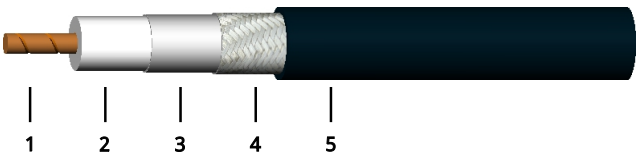
Mechanical

Bend Radius (installation):	40.0mm
Bend Radius (repeated):	80.0mm
Weight:	250g/m

Environmental

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

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	4.47	Stranded Copper
2	Dielectric	11.56	Foam PE
3	Outer Conductor	11.71	Double-edged aluminum foil
4	Outer Shield	12.45	Tin-plated copper braid
5	Jacket	15.00	TPE

Attenuation & Power Handling

Frequency (GHz)	0.03	0.05	0.15	0.22	0.45	0.9	1.5	1.8	2
Attenuation*1 (dB/100m)	1.7	2.2	3.8	4.6	6.8	9.8	13.1	14.5	15.4
Average Power*2 (W)	4590	3540	2010	1640	1130	770	580	530	500

[1] VSWR:1.0; Ambient: +25℃ (77℉)
[2] VSWR:1.0; Ambient: +40℃ (104℉); Sea level
Calcuate Cable Attenuation: Attenuation (dB/100m) = $0.2974409 * \sqrt{F\ (MHz)} + 0.0010236 * F\ (MHz)$
Calcuate Connector Attenuation: Attenuation (dB) = $0.03 * \sqrt{F\ (GHz)}$

How To Order

QR1500U-X-Y-Z
X: Frequency in GHz
Y: Connector type
Z: Length in meters

Examples:
To order a QR1500U cable assembly, DC-2GHz, 7/16 DIN male, 1.5 meters, specify QR1500U-2-77-1.5.

Connector naming rules:
7 - 7/16 DIN (L29) (2GHz, VSWR 1.35)

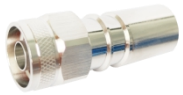
Female Connector - Add ‘F’ after connector name
Right Angle - Add ‘R’ after connector name (VSWR increase 0.1)

Mating Connector

QCS-MCB-R1500-1
SMA male, Crimping type, Ternary alloy plated brass

QCS-MRCB-R1500-1
SMA male, Right angle, Crimping type, Ternary alloy plated brass & Nickel plated brass

QCN-MCB-R1500-1
N male, Crimping type, Ternary alloy plated brass



QCN-MRCB-R1500-1
N male, Right angle, Crimping type, Nickel plated brass