

E₂O® Coaxial/Fiber Hybrid Aerial Cable

- E₂O is a solution that enables service providers the ability to bridge HFC networks to FTTH. The E₂O composite coaxial/fiber product line combines fiber, microducts, and coaxial cable under one jacket.
- Serves businesses in a new commercial serving area
- Mitigates future cost of fiber installation
- Saves on initial installation due to “single sheath” vs. multiple sheaths
- Ideal for commercial data customers that also require video
- All products tested to industry standards

Product Classification

Brand	E ₂ O®
Product Type	Hybrid cable, coax and fiber

Dimensions

Height	24.638 mm 0.970 in
Outer Jacket Thickness, nominal	0.762 mm 0.030 in
Shipping Weight	184.00 lb/kft
Width	17.018 mm 0.670 in

Environmental Specifications

Environmental Space	Aerial
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General Specifications

Cable Series	QR 540
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Material Specifications

Total Fiber Count	48
Outer Jacket Material	Medium density polyethylene (MDPE)
Ripcord Material	Polyester

Mechanical Specifications

Minimum Bend Radius	101.60 mm 4.00 in
Pulling Tension, maximum	33 kg 73 lb

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

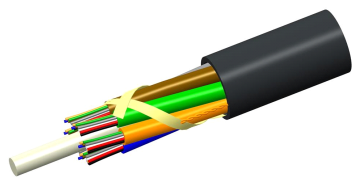


Included Products

810008927/DB | B-048-LN-8W-F12NS/16G — LightScope ZWP® Blown Micro Single Jacket All-Dielectric Outdoor Stranded Loose Tube Arid-Core® Construction Cable

- DB-8W-MicroLT (Product Component—not orderable) — LightScope ZWP® Singlemode Fiber

550006392 | QR® 540 JCA (Product Component—not orderable) — 75 Ohm QR® Trunk and Distribution Cable, black PE jacket



LightScope ZWP® Blown Micro Single Jacket All-Dielectric Outdoor Stranded Loose Tube Arid-Core® Construction Cable

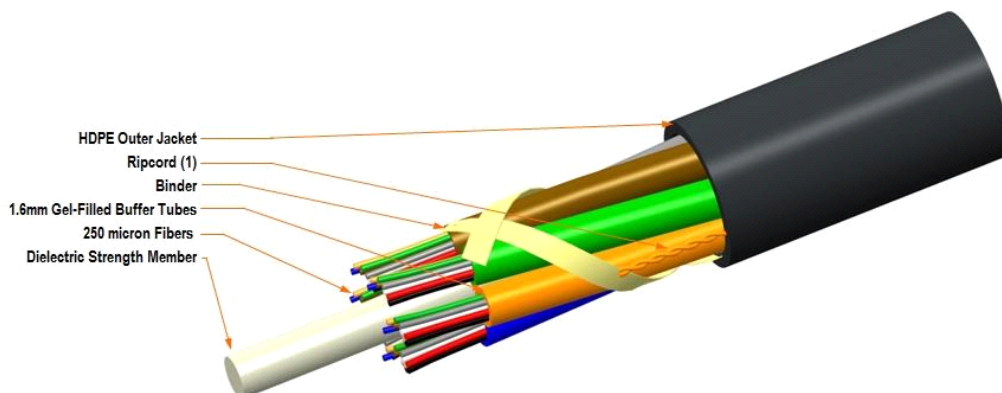
Product Classification

Portfolio	CommScope®
Product Type	Fiber OSP cable
Regional Availability	Asia Australia/New Zealand EMEA Latin America North America

Standards And Qualifications

Cable Qualification Standards	IEC 60794-5-10
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Representative Image



General Specifications

Cable Type	Stranded loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled

Construction Materials

Fiber Type Solution	G.652.D and G.657.A1
Jacket Material	High density polyethylene (HDPE)
Total Fiber Count	48
Fiber Type	G.652.D and G.657.A1
Fiber Type, quantity	48
Fibers per Subunit, quantity	12

Jacket Color	Black
Jacket UV Resistance	UV stabilized

Dimensions

Buffer Tube/Subunit Diameter	1.60 mm 0.06 in
Cable Weight	20.0 kg/km 14.0 lb/kft
Diameter Over Jacket	5.50 mm 0.22 in
Filler, quantity	1
Subunit, quantity	4

Physical Specifications

Minimum Bend Radius, loaded	8.2 cm 3.2 in
Minimum Bend Radius, unloaded	5.5 cm 2.2 in
Tensile Load, long term, maximum	97 N 22 lbf
Tensile Load, short term, maximum	324 N 73 lbf
Vertical Rise, maximum	492.0 m 1614.2 ft

Environmental Specifications

Environmental Space	Air-blown, microduct
Installation Temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Operating Temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Storage Temperature	-30 °C to +75 °C (-22 °F to +167 °F)

Mechanical Test Specifications

Compression	10 N/mm
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	0.30 N-m 0.22 ft lb
Impact Test Method	FOTP-25 IEC 60794-1 E4
Strain	See long and short term tensile loads
Strain Test Method	FOTP-33 IEC 60794-1 E1
Twist	10 cycles
Twist Test Method	FOTP-85 IEC 60794-1 E7
Water Penetration	24 h
Water Penetration Test Method	FOTP-82 IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze	-2 °C 28 °F
Cable Freeze Test Method	FOTP-98 IEC 60794-1 F15
Drip	70 °C 158 °F
Drip Test Method	FOTP-81 IEC 60794-1 E14
Heat Age	-30 °C to +85 °C (-22 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-30 °C to +60 °C (-22 °F to +140 °F)
Low High Bend Test Method	FOTP-37 IEC 60794-1 E11
Temperature Cycle	-30 °C to +70 °C (-22 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3 IEC 60794-1 F1

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



Included Products

DB-8W-MicroLT (Product Component—not orderable) — LightScope ZWP® Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

75 Ohm QR® Trunk and Distribution Cable, black PE jacket



Product Classification

Brand	QR®
Product Type	Coaxial hardline cable

Construction Materials

Jacket Material	PE
Center Conductor Material	Copper-clad aluminum
Construction Type	Welded
Dielectric Material	Foam PE
Outer Conductor Material	Aluminum

Dimensions

Diameter Over Center Conductor, nominal	3.150 mm 0.124 in
Diameter Over Dielectric, nominal	13.056 mm 0.514 in
Diameter Over Outer Conductor, nominal	13.716 mm 0.540 in
Diameter Over Jacket, nominal	15.494 mm 0.610 in
Jacket Thickness, nominal	0.8890 mm 0.0350 in
Outer Conductor Thickness, nominal	0.3429 mm 0.0135 in
Cable Length	1128 m 3700 ft
Shipping Weight	120.00 lb/kft

Electrical Specifications

dc Resistance, Inner Conductor, nominal	1.02 ohms/kft
dc Resistance, Outer Conductor, nominal	0.59 ohms/kft
dc Resistance, Loop, nominal	1.61 ohms/kft
dc Resistance Note	Nominal values based on a standard condition of 20 °C (68 °F)
Capacitance	50.2 pF/m 15.3 pF/ft
Capacitance Tolerance	±1.0 pF/ft
Characteristic Impedance	75 ohm

Characteristic Impedance Tolerance	±2 ohm
Jacket Spark Test Voltage	5000 Vac
Nominal Velocity of Propagation (NVP)	88 %
Operating Frequency Band	5–3000 MHz
Structural Return Loss	26 dB @ 1002–1218 MHz 30 dB @ 5–1002 MHz

Environmental Specifications

Environmental Space	Aerial
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General Specifications

Cable Type	540 series
Jacket Color	Black
Packaging Type	Reel
Short Description	QR 540 JCA SM PR2171

Mechanical Specifications

Pulling Tension, maximum	100 kg 220 lb
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Electrical Performance

Frequency	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
5 MHz	0.46	0.14
55 MHz	1.56	0.48
83 MHz	1.90	0.58
85 MHz	1.94	0.59
204 MHz	3.05	0.93
211 MHz	3.12	0.95
250 MHz	3.38	1.03
300 MHz	3.71	1.13
350 MHz	4.04	1.23
400 MHz	4.33	1.32
450 MHz	4.59	1.40
500 MHz	4.89	1.49
550 MHz	5.12	1.56
600 MHz	5.38	1.64
750 MHz	6.07	1.85
865 MHz	6.56	2.00
1000 MHz	7.12	2.17
1002 MHz	7.13	2.17
1218 MHz	8.05	2.45
1300 MHz	8.34	2.54
1400 MHz	8.68	2.65
1500 MHz	9.01	2.75
1600 MHz	9.34	2.85
1700 MHz	9.65	2.94

1794 MHz	9.94	3.03
1800 MHz	9.96	3.04
2000 MHz	10.56	3.22
2200 MHz	11.13	3.39
2400 MHz	11.68	3.56
2600 MHz	12.21	3.72
2800 MHz	12.73	3.88
3000 MHz	13.23	4.03

* Attenuation listed represents maximum values at standard condition of 20 °C (68 °F)

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU
ISO 9001:2015

Classification

Compliant
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