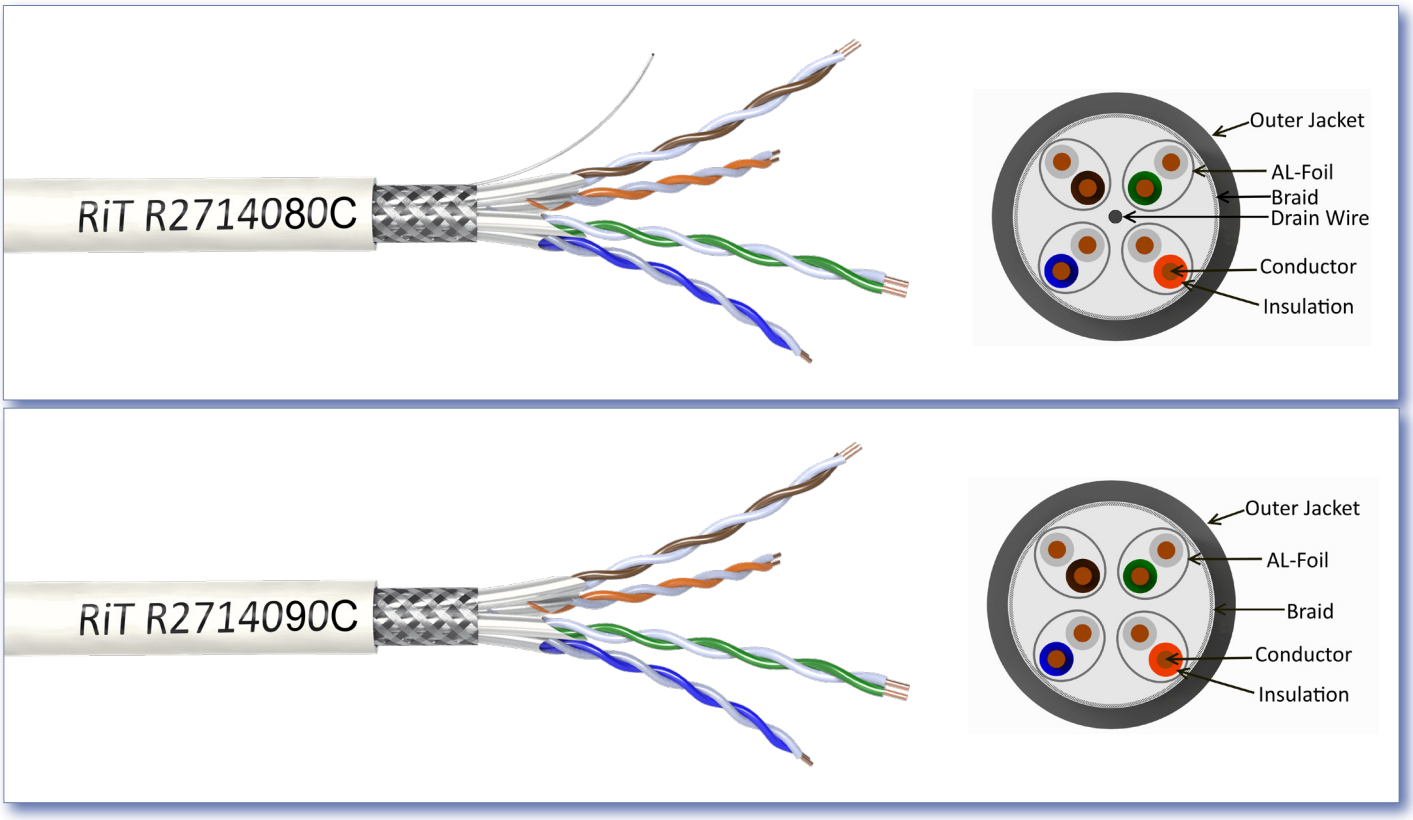

RiT Category 7A S/FTP Cable, 22 AWG solid wires, 4 individually AL-Foil shielded twisted pairs, Overall braiding (30/40/50/55%), with/without drain wire, cabled together and jacketed with LSZH FR compound.

KEY APPLICATIONS

- 10/100/1000Base-T, 10G
- Power over Ethernet (PoE)

KEY FEATURES

- Designed to support Cat 7A Link and Channel performance
- Electrical performance tested up to 1200 MHz
- Supports PoE Type 4 applications (IEEE 802.3bt)
- Exceeds the requirements of ISO/IEC 11801 (IEC 61156-5)
- 100% factory tested

STANDARDS COMPLIANCE

- IEC 61156-5
- ISO/IEC 11801
- IEEE 802.3bt (PoE Type 4)
- Flammability Rating:
  IEC 60332-1
  IEC 60332-3-22(3A)
  IEC 60332-3-24(3C)
- Acid Gas Emission Test IEC 60754-1&2
- Smoke Density Test IEC 61034-1&2
- EU Regulation CPR Class Dca-s1,d1,a1
- RoHS2: Directives 2011/65/EU, 2015/863/EU

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TECHNICAL SPECIFICATION

FREQ.	Attenuation	NEXT	PS NEXT	EL FEXT	PS EL FEXT	RL	TCL	EL TCL	PS ANEXT	PS AFEXT
MHz	dB/100m	dB	dB	dB	dB	dB	dB	dB	dB	dB
1	2.1	78.0	75.0	78.0	75.0	20.0	40.0	35.0	67.0	67.0
4	3.7	78.0	75.0	78.0	75.0	23.0	34.0	23.0	67.0	67.0
10	5.8	78.0	75.0	75.3	72.3	25.0	30.0	15.0	67.0	67.0
20	8.2	78.0	75.0	69.3	66.3	25.0	28.0	9.0	67.0	67.0
25	9.2	78.0	75.0	67.3	64.3	24.3	26.0	7.0	67.0	65.2
31.25	10.3	78.0	75.0	65.4	62.4	23.6	25.2	5.1	67.0	63.3
62.5	14.6	78.0	75.0	59.4	56.4	21.5	22.0	-	67.0	57.3
100	18.5	75.4	72.4	55.3	52.3	20.1	20.0	-	67.0	53.2
200	26.5	70.9	67.9	49.3	46.3	18.0	17.0	-	67.0	47.2
250	29.7	69.4	66.4	47.3	44.3	17.3	16.0	-	67.0	45.2
300	32.7	68.2	65.2	45.8	42.8	17.3	-	-	67.0	43.7
400	38.0	66.4	63.4	43.0	40.0	17.3	-	-	67.0	41.2
500	42.8	64.9	61.9	41.3	38.3	17.3	-	-	67.0	39.2
600	47.1	63.7	60.7	39.7	36.7	17.3	-	-	65.8	37.6
700	51.1	62.7	59.7	38.0	35.0	16.6	-	-	64.8	36.3
800	54.9	61.9	58.9	37.2	34.2	16.1	-	-	64.0	35.1
1000	61.9	60.4	57.4	35.3	33.3	15.1	-	-	62.5	33.2
1200	69.0	59.2	56.2	32.0	29.0	14.3	-	-	61.3	31.6

Note: The cables comply with IEC 61156-5 CAT7A standard requirements. The transmission values above 1000 MHz are for reference only

Cable Construction	
Outer Jacket Diameter & Color	Ø7.8, Gray-White
Outer Jacket Thickness	0.7 ±0.1mm
Outer Jacket Material	LSZH, FR (Flame Retardant)
Conductor Material	Annealed Bare Copper
Conductor Size	22 AWG
Conductor Construction	Solid
Conductor unit lay-up	Twisted Pairs
Number of conductors	8
Drain-wire (when applicable)	Ø0.4 ±0.01 mm Tinned Copper
Insulation Material	Foam Polyethylene
Color Code	White - Blue, White - Orange, White - Green, White - Brown
Ind. Pair Shield Design	Helically applied Polyester-Alumi-num foil 100% coverage
Ind. Pair Shield Material	Aluminum/ Poly-laminated Foil
Overall Shielding	Tined Copper wire braid (30/40/50%/55% coverage)
Cable Marking	RiT P/N, Cable Description, Meter Mark and Batch Number

Electrical Characteristics	
Frequency Range	1200 MHz
Characteristic Impedance	100 Ω ±15 Ω (1-100Mhz) 100 Ω ±22 Ω (101-250Mhz) 100 Ω ±25 Ω (251-1000Mhz)
Max. DC Resistance	6.3 Ω/100m
Insulation Resistance	5000 MΩ•Km min. @ 500 Vdc
Coupling Attenuation	IEC 61156-5 Type I
Screening Attenuation	60 dB min @ 30-1000 MHz
Max. Resistance Unbalance	2 % (in pairs)
Capacitance	56 pF/m nom. @ 1 KHz
Max. Propagation Delay	534+36/f1/2 nS/100m
Max. Propagation Delay Skew:	20 ns/100m
Max. Capacitance Unbalance	1600 pF/1Km
Dielectric Strength	700 V/ 1 minute
NVP	74%
Min. Insulation Resistance	5 GΩ •km
Max. Voltage Rating	72 Vdc

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Mechanical Properties	
Minimum Bending Radius	60mm Long Term, 40mm Short Term
Maximum Pulling Force	110 N
Storage Temperature	-20°C to +75°C
Operating Temperature	-20°C to +65°C
Installation Temperature	0°C to +50°C
Weight	~ 67 Kg/Km (55% Braiding)

ORDERING INFORMATION

P/N	DESCRIPTION
R2714030C	CAT 7A, S/FTP, Horizontal Cable, 22AWG, 30% Braid, LSZH, 332-3-22/24, with Drain Wire, 500m Reel
R2714040C	CAT 7A, S/FTP, Horizontal Cable, 22AWG, 40% Braid, LSZH, 332-3-22/24, with Drain Wire, 500m Reel
R2714010C	CAT 7A, S/FTP, Horizontal Cable, 22AWG, 50% Braid, LSZH, 332-3-22/24, with Drain Wire, 500m Reel
R2714050C	CAT 7A, S/FTP, Horizontal Cable, 22AWG, 30% Braid, LSZH, 332-3-22/24, without Drain Wire, 500m Reel
R2714060C	CAT 7A, S/FTP, Horizontal Cable, 22AWG, 40% Braid, LSZH, 332-3-22/24, without Drain Wire, 500m Reel
R2714070C	CAT 7A, S/FTP, Horizontal Cable, 22AWG, 50% Braid, LSZH, 332-3-22/24, without Drain Wire, 500m Reel
R2714080C	CAT 7A, S/FTP, Horizontal Cable, 22AWG, 55% Braid, LSZH, 332-3-22/24, with Drain Wire, 500m Reel
R2714090C	CAT 7A, S/FTP, Horizontal Cable, 22AWG, 55% Braid, LSZH, 332-3-22/24, without Drain Wire, 500m Reel

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