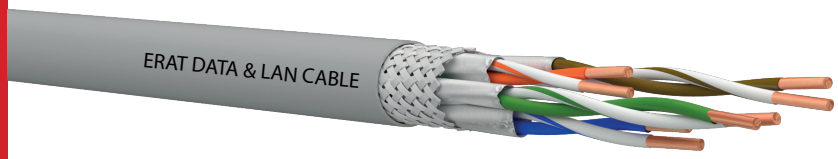
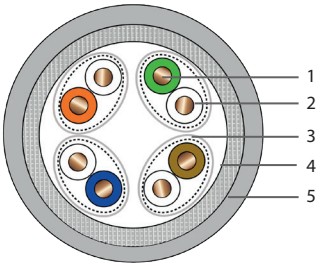
CAT 7A S-FTP 22 AWG 1200 MHZ DATA CABLE

TS EN 60332-1-2





AREAS OF USE / FEATURES

ERAT CAT 7A cables are designed for the transmission of digital and analog voice, data, video, and PoE signals.

ERAT CAT 7A S/FTP cables support data transmission rates of up to 10 Gigabit Ethernet (10GBASE-T) with an operating bandwidth of 1200 MHz. They are available with LSZH, HFFR, or PVC outer jackets to meet specific customer requirements.

- 10000BASE-TX Gigabit Ethernet
- 10000BASE-T Gigabit Ethernet
- 1000BASE-TX Gigabit Ethernet
- 1000BASE-T Gigabit Ethernet
- ATM 155 / ATM 25
- 100BASE-T "Fast Ethernet"
- 100BASE-T2/ 100BASE-T4
- 100BASE-TX
- 10BASE-T Ethernet
- ISDN, TPDDI, TP-PMD
- Power Over Ethernet (PoE)

CABLE CONSTRUCTION

1. Copper Conductor
2. LSZH / PVC Isolated
3. Aluminum Foil
4. Tinned Copper Braid
5. Outer Sheath

PHYSICAL PROPERTIES

Conductor	Pure, annealed copper
Conductor Diameter	22 AWG
Isolated	Polyolefin
Number of Isolates	8, in 4 twisted pairs
Internal Shielding	Laminated aluminum foil providing 100% opacity (foil side facing outwards)
External Shielding	Tinned Copper Braid
Outer Sheath	LSZH (Low Smoke Zero Halogen) flame-retardant or PVC compound
Jacket Color	Grey (RAL 7040). (Different colors can be produced upon customer request.)
CPR	Dca
Performance Guarantee	A 25-year system performance guarantee is offered when end-to-end ERAT-branded products are used.
Cable Labeling Information	Brand, Cable type, Relevant standards, Date, Serial number, Meters

MECHANICAL AND ENVIRONMENTAL PROPERTIES

Tensile Force	50 N / mm ^{2} max
Bending Radius (Short-Term)	4 x Cable Diameter
Bending Radius (Long-Term)	8 x Cable Diameter
Operating Temperature	-40 to +70 °C
Installation Temperature	-10 to +50 °C
Storage Temperature	-40 to +70 °C

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PACKAGING, DIMENSIONS & WEIGHT		
Packaging Type	**Outer Diameter (mm)**	**Approximate Weight (kg)**
500 m Plywood Reel	7.9±0.3	31.1
1000 m Plywood Reel	7.9±0.3	63.4

ELECTRICAL PROPERTIES	
Impedance Characteristic	100±6 Ohm @ 1-1200 MHz
DC Resistance	70 Ohm/km max.
Resistance Imbalance	2% max.
Effective Capacity	45 pF/m nom. @ 1 KHz
Capacitance Imbalance (to Ground)	1600 pF/km max. @ 1 KHz.
Voltage	72 Vdc max.
Dielectric Strength	1500 Volts / 1 minute min. RMS
Signal Speed (NVP)	Min. %77 - 80
Signal Transmission Time (Propagation Delay)	534 + 36/$f^{½}$nS/100m max. @ 1-1200 MHz
Inter-lane Signal Skew	25 nS/100m max @ 1-1200 MHz
Insulation Resistance	5000 MegaOhm•km min. @ 500 Vdc
Joint Attenuation	55 dB min @ 30-100 MHz 55-20Log(f/100) @100-1200 MHz
Transfer Impedance	10 mOhm/m max @ 1-30 MHz 30 MOhm/m max @ 30-100 MHz

Frequency (MHz)	Return Loss (dB)	İnsertion Loss (dB/100m)	NEXT Loss (dB)	PS NEXT Loss (dB)	PS ELFEXT (dB/100m)
1	20,0	2,1	78,0	75,0	-
4	23,0	3,7	78,0	75,0	75,0
8	24,5	5,2	78,0	75,0	74,2
10	25,0	5,8	78,0	75,0	72,3
16	25,0	7,3	78,0	75,0	68,2
20	25,0	8,2	78,0	75,0	66,3
25	24,3	9,2	78,0	75,0	64,3
31,25	23,6	10,3	78,0	75,0	62,4
62,5	21,5	14,6	78,0	75,0	56,4
100	20,1	18,5	75,4	72,4	52,3
200	18,0	26,5	70,9	67,9	46,3
250	17,3	29,7	69,4	66,4	44,3
300	17,3	32,7	68,2	65,2	42,8
400	17,3	38,0	66,4	63,4	40,3
500	17,3	42,8	64,9	61,9	38,3
600	17,3	47,1	63,7	60,7	36,7
1000	17,3	61,9	60,4	57,4	32,3
1200	17,3	68,4	59,2	56,2	30,7

Values above 1000 MHz are provided for reference.

ISOLATED COLORS



Blue	White	Orange	White	Yellow	White	Brown	White