



EC1500 CAT 7A+ S/FTP PE F_{ca}



Application

10Base-T, 100Base-T, 1000Base-T, 10GBase-T, and Fibrebus systems. Applicable for Power over Ethernet PoE / PoE+

Cable Construction

- 22 AWG Bare Copper
- Skin/Foam/Skin PE Insulation
- Al-Pet Foil 100% Coverage
- Tinned Copper Wire Braiding
- Ø 8.20 mm ± 0.20 PE

Technical Properties

Cable Weight	68 kg/km
Copper Weight	34 kg/km
Min. Bending radius during draw in	66 mm
Min. Bending radius permanently installed	33 mm
Max. Tensile Strength	95 N
Min. Crush Resistance	1000 N/10 cm
Min. Impact	10 Impacts
Installation Temperature	0°C ... +50°C
Operating Temperature	-20°C ... +70°C
Packing	305 / 500 m

Electrical Properties

Max. Conductor Resistance	< 9.5 Ω / km
Max. Resistance Unbalance	< 2%
Min. Insulation Resistance	5000 MΩ x m
Mutual Capacitance	< 56 pF / m
Capacitance Unbalance	1600 pF / km
Impedance at 100 MHz	100 ± 5 Ω
Velocity of Propagation	76 %
Delay Skew	< 25 ns / 100 m
Coupling Attenuation	> 85 dB
Segregation Class	D
Transfer Impedance at 1/10/30 MHz	< 10/10/30 mΩ/m
Test Voltage	1000 V
Operating Voltage	125 V

at 20 °C

Standards

EIA/TIA-568
ISO/IEC 11801 Class F
IEC 61156-5, EN 50173-1
EN 50288-4-1

Euro Class
F_{ca}

Electrical Data (Nominal)

@ 20 °C

Frequency (MHz)	Attenuation (dB/100 m)	NEXT (dB)	PS - NEXT (dB)	ACR (dB/100 m)	PS-ACR (dB/100 m)	ACRF (dB/100 m)	PS-ACRF (dB/100 m)	Return Loss (dB)
1	1.9	101	101	99	96	101	98	24
4	3.2	101	101	97	94	98	95	30
10	4.9	98	98	95	92	98	95	32
100	17.2	97	97	82	79	84	81	34
250	28.0	93	92	63	60	70	67	27
500	41.5	95	92	56	53	61	58	24
600	43.7	88	85	45	42	59	56	22
800	53.2	84	81	30	27	52	49	20
1000	55.4	83	80	28	25	50	47	19
1200	57.0	80	77	23	20	49	46	18
1500	67.0	81	78	14	11	11	38	34