
SVARN
Inspired by possibilities
The backbone
of our digital world
LAN AND PATCH CABLES
SVARN GROUP
TELECOM | AUTOMOTIVE | DEFENCE | RAILWAYS | POWER | PROJECT

SVARN LAN CABLES AND PATCH CORDS

Empowering digital networks with speed and reliability

In today's increasingly digital environment, the reliable transmission of power, signals, and data demands both the swift availability of standardised plug-and-produce solutions and the development of specialised cables that are efficient to assemble and operate. Whether you need patch cables for end devices or LAN cables for a comprehensive network, Svarn provides the ideal cabling solutions for every application.

With nearly two decades of expertise in manufacturing cables for various industries, Svarn offers an extensive range of high-quality LAN and patch cables. Choose from our wide selection of pre-assembled cables or contact us for customized solutions tailored to your specific needs, including cable lengths, plugs, markings, and colours. From standard solutions to innovative new developments, Svarn ensures you are always properly connected.

Svarn cables are built to superior quality standards, far exceeding the requirements of ANSI/TIA-568-C.2 and ISO/IEC 11801.

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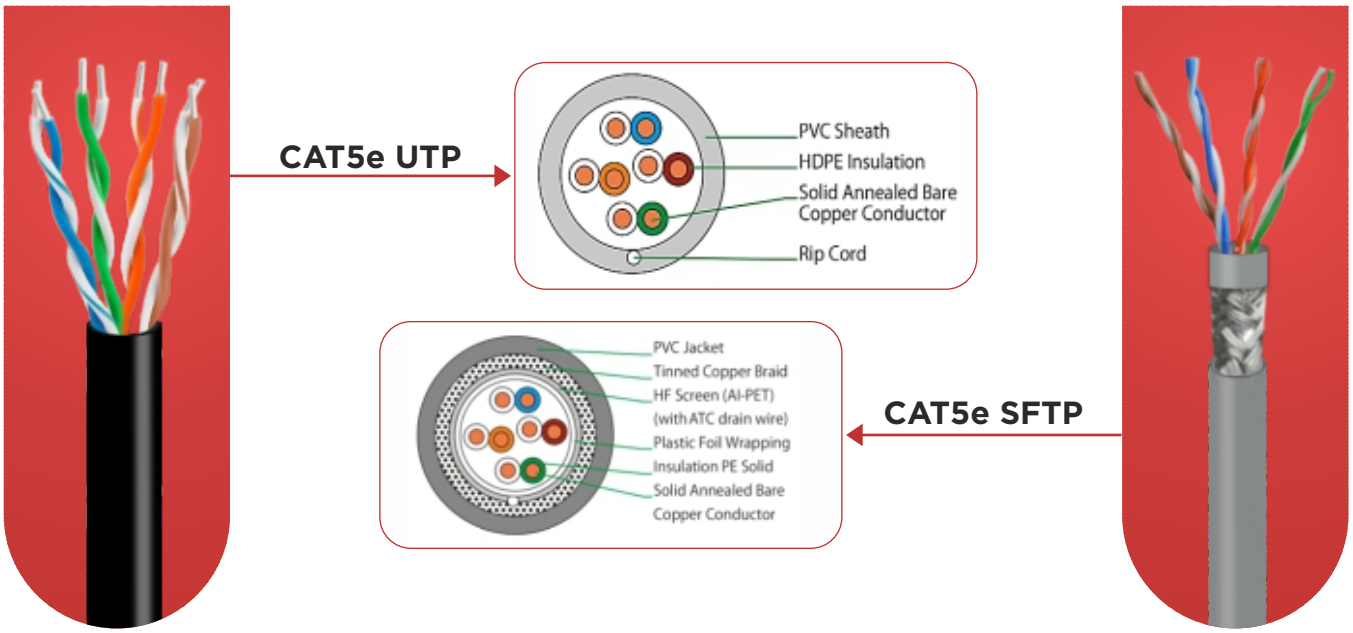
ABOUT US

At Svarn, we're pioneers in turning big ideas into real-world solutions. Our legacy of innovation, rooted in the essence of "Svarn" or Gold, has thrived since 2005. With over 3,000 dedicated employees, we're constantly pushing the boundaries of technology to benefit our customers and society. Our impact spans across six key industries, supported by seven cutting-edge manufacturing facilities and global offices in strategic locations. Through relentless innovation, we're shaping a prosperous and sustainable future

— inspired by possibilities.

Know more at www.svarn.com

CAT5E UTP & CAT5E SFTP



S.NO.	PARAMETER	UNIT	CAT-5E CABLE	
			UTP	SFTP
1	Application	-	Fast Ethernet 100 Base-TX, Gigabit Ethernet 1000 Base-T	
2	Frequency Band	Mhz.	1-100	
3	Conductor	-	24AWG Solid Bare Copper	
4	Insulation	-	High density Polyethylene	
5	Pair	-	4 Twisted Pair	
6	Shielding	-	-	Overall Aluminum/ Polyester Foil & ATC Braiding (Protection against EMI)
7	Sheath	-	PVC/LSZH	
8	Overall Diameter	mm	5.8	6
9	Colour of Outer Sheath	-	Blue/Grey/Black	
10	Conductor Resistance @ 20°C	Ω/Km	93.8	
11	Capacitance @ 1 KHz	nF/Km	50	
12	Insulation resistance at 500 V	M ohm-Km	5000	
13	Impedance @ 1 MHz	Ω	100	
14	TS. of Insulation	N/Sqmm	12.5	
15	Elongation of Insulation	%	300	
16	TS. of Sheath	N/Sqmm	12.5	
17	Elongation of Sheeth	%	150	
18	Bending Radius at low temp	-	10 x Overall diameter of cable	
19	RoHS	-	Complaint	
20	Applicable Standards	-	Standard TIA/EIA 568A.C2	
21	High Voltage Test	1KV/1min	withstood	
22	Temperature Range	-	-20°C to 70°C	

For more information please contact: **Paresh Gupta** – paresh@svarn.com

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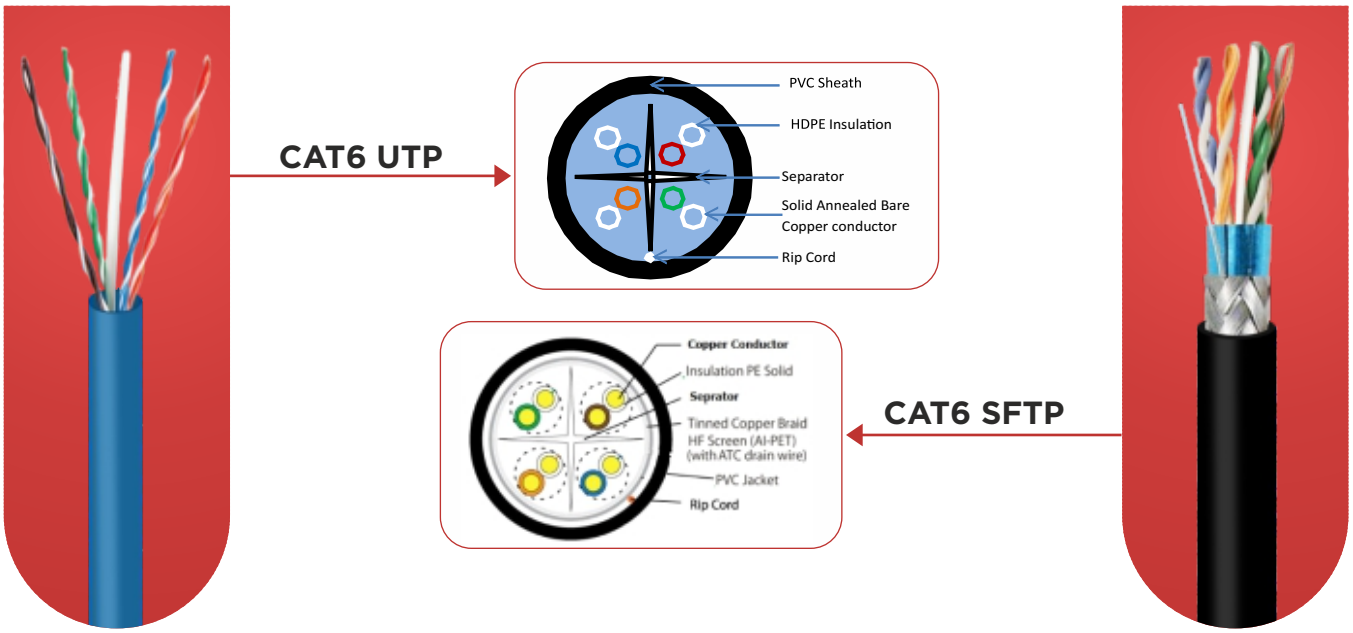
TECHNICAL SPECIFICATIONS

S.NO.	PARAMETER	UNIT	CAT-5E CABLE	
			UTP	SFTP
23	Attenuation @ 1 MHz	dB/100m max.	3	
	Attenuation @ 10 MHz	dB/100m max.	7.1	
	Attenuation @ 20 MHz	dB/100m max.	10.2	
	Attenuation @ 100 MHz	dB/100m max.	24	
	Attenuation @ 200 MHz	dB/100m max.	-	
	Attenuation @ 250 MHz	dB/100m max.	-	
	Attenuation @ 300 MHz	dB/100m max.	-	
	Attenuation @ 400 MHz	dB/100m max.	-	
	Attenuation @ 500 MHz	dB/100m max.	-	
24	Return Loss @ 1 MHz	dB min.	17	
	Return Loss @ 10 MHz	dB min.	17	
	Return Loss @ 20 MHz	dB min.	17	
	Return Loss @ 100 MHz	dB min.	10	
	Return Loss @ 200 MHz	dB min.	-	
	Return Loss @ 250 MHz	dB min.	-	
	Return Loss @ 300 MHz	dB min.	-	
	Return Loss @ 400 MHz	dB min.	-	
	Return Loss @ 500 MHz	dB min.	-	
25	NEXT @ 1 MHz	dB min.	60	
	NEXT @ 10 MHz	dB min.	47	
	NEXT @ 20 MHz	dB min.	42	
	NEXT @ 100 MHz	dB min.	30.1	
	NEXT @ 200 MHz	dB min.	-	
	NEXT @ 250 MHz	dB min.	-	
	NEXT @ 300 MHz	dB min.	-	
	NEXT @ 400 MHz	dB min.	-	
	NEXT @ 500 MHz	dB min.	-	
26	Propogation delay	ns (max.)	491	
27	Propogation Skey delay	ns (max.)	45	

CAT6 UTP & CAT6 SFTP



S.NO.	PARAMETER	UNIT	CAT-6 CABLE	
			UTP	SFTP
1	Application	-	10 Gigabit Ethernet,10GBase-T	
2	Frequency Band	Mhz.	1-100	
3	Conductor	-	24AWG Solid Bare Copper	
4	Insulation	-	High Density Polyethylene	
5	Pair	-	4 Twisted Pair	
6	Shielding	-	-	Individual Pair Aluminum/ Polyester Foil & Overall ATC Braiding (Protection against EMI)
7	Sheath	-	PVC/LSZH	
8	Overall Diameter	mm	6.5	7.5
9	Colour of Outer Sheath	-	Blue/Grey/Black	
10	Conductor Resistance @ 20°C	Ω/Km	75	
11	Capacitance @ 1 KHz	nF/Km	56	
12	Insulation resistance at 500 V	M ohm-Km	5000	
13	Impedance @ 1 MHz	Ω	100	
14	TS. of Insulation	N/Sqmm	12.5	
15	Elongation of Insulation	%	300	
16	TS. of Sheath	N/Sqmm	12.5	
17	Elongation of Sheeth	%	150	
18	Bending Radius at low temp	-	10 x Overall diameter of cable	
19	RoHS	-	Complaint	
20	Applicable Standards	-	Standard TIA/EIA 568A.C2	
21	High Voltage Test	1KV/1min	withstood	
22	Temperature Range	-	-20°C to 70°C	

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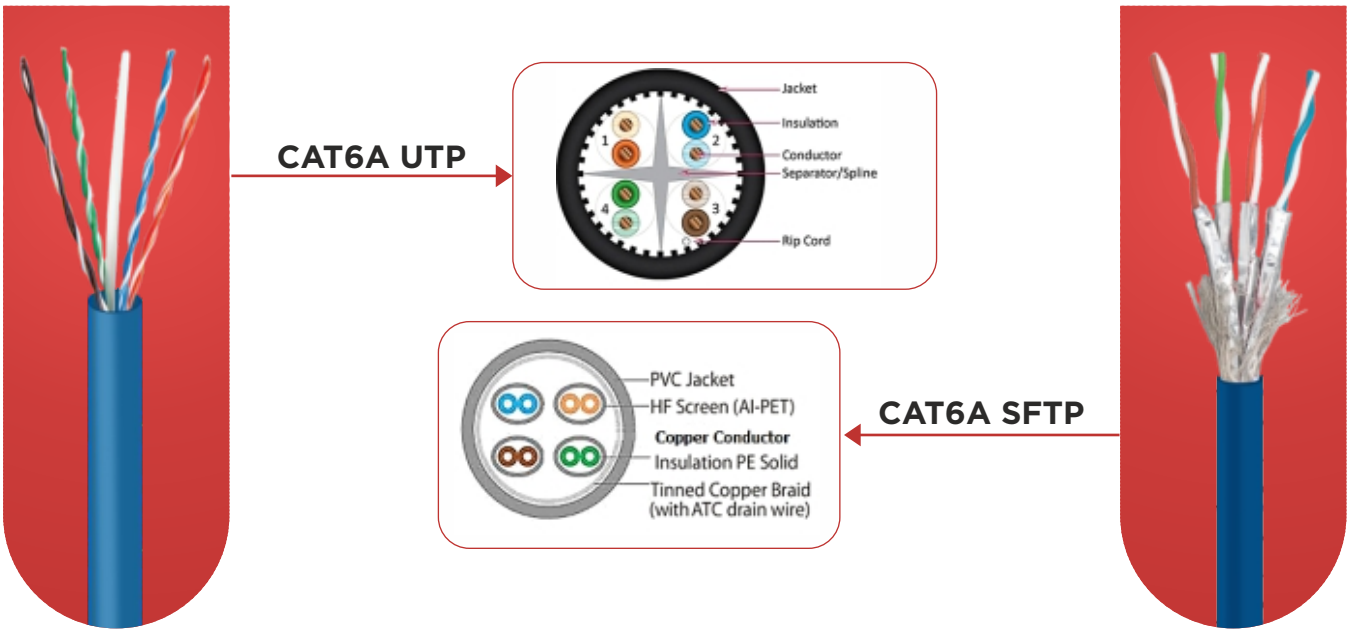
TECHNICAL SPECIFICATIONS

S.NO.	PARAMETER	UNIT	CAT-6 CABLE	
			UTP	SFTP
23	Attenuation @ 1 MHz	dB/100m max.	3	
	Attenuation @ 10 MHz	dB/100m max.	6.3	
	Attenuation @ 20 MHz	dB/100m max.	9	
	Attenuation @ 100 MHz	dB/100m max.	21.3	
	Attenuation @ 200 MHz	dB/100m max.	31.5	
	Attenuation @ 250 MHz	dB/100m max.	35.9	
	Attenuation @ 300 MHz	dB/100m max.	37.4	
	Attenuation @ 400 MHz	dB/100m max.	43.7	
	Attenuation @ 500 MHz	dB/100m max.	49.3	
24	Return Loss @ 1 MHz	dB min.	19	
	Return Loss @ 10 MHz	dB min.	19	
	Return Loss @ 20 MHz	dB min.	17.5	
	Return Loss @ 100 MHz	dB min.	12	
	Return Loss @ 200 MHz	dB min.	9	
	Return Loss @ 250 MHz	dB min.	8	
	Return Loss @ 300 MHz	dB min.	-	
	Return Loss @ 400 MHz	dB min.	-	
	Return Loss @ 500 MHz	dB min.	-	
25	NEXT @ 1 MHz	dB min.	65	
	NEXT @ 10 MHz	dB min.	56.6	
	NEXT @ 20 MHz	dB min.	51.6	
	NEXT @ 100 MHz	dB min.	39.9	
	NEXT @ 200 MHz	dB min.	34.8	
	NEXT @ 250 MHz	dB min.	33.1	
	NEXT @ 300 MHz	dB min.	-	
	NEXT @ 400 MHz	dB min.	-	
	NEXT @ 500 MHz	dB min.	-	
26	Propogation delay	ns (max.)	490	
27	Propogation Skey delay	ns (max.)	45	

CAT6A UTP & CAT6A SFTP



S.NO.	PARAMETER	UNIT	CAT-6A CABLE	
			UTP	SFTP
1	Application	-	10 Gigabit Ethernet, 10GBase-T	
2	Frequency Band	Mhz.	1-500	
3	Conductor	-	23AWG Solid Bare Copper	
4	Insulation	-	High Density Polyethylene	
5	Pair	-	4 Twisted Pair	
6	Shielding	-	-	Individual Pair Aluminum/ Polyester Foil & Overall ATC Braiding (Protection against EMI)
7	Sheath	-	PVC/LSZH	
8	Overall Diameter	mm	6.5	7.5
9	Colour of Outer Sheath	-	Blue/Grey/Black	
10	Conductor Resistance @ 20°C	Ω/Km	75	
11	Capacitance @ 1 KHz	nF/Km	56	
12	Insulation resistance at 500 V	M ohm-Km	5000	
13	Impedance @ 1 MHz	Ω	100	
14	TS. of Insulation	N/Sqmm	12.5	
15	Elongation of Insulation	%	300	
16	TS. of Sheath	N/Sqmm	12.5	
17	Elongation of Sheeth	%	150	
18	Bending Radius at low temp	-	10 X Overall Diameter Of Cable	
19	RoHS	-	Complaint	
20	Applicable Standards	-	Standard TIA/EIA 568A.C2	
21	High Voltage Test	1KV/1min	Withstood	
22	Temperature Range	-	-20°C to 70°C	

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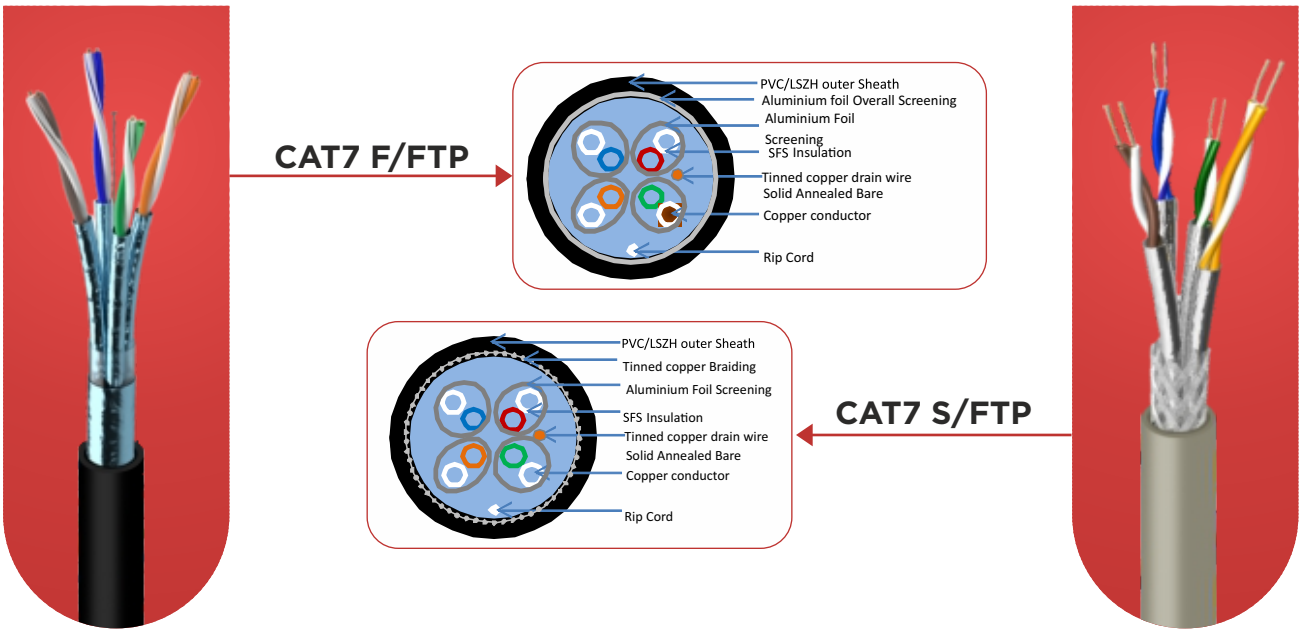
TECHNICAL SPECIFICATIONS

S.NO.	PARAMETER	UNIT	CAT-6A CABLE	
			UTP	SFTP
23	Attenuation @ 1 MHz	dB/100m max.	3	
	Attenuation @ 10 MHz	dB/100m max.	6.3	
	Attenuation @ 20 MHz	dB/100m max.	9	
	Attenuation @ 100 MHz	dB/100m max.	21.3	
	Attenuation @ 200 MHz	dB/100m max.	31.5	
	Attenuation @ 250 MHz	dB/100m max.	35.9	
	Attenuation @ 300 MHz	dB/100m max.	37.4	
	Attenuation @ 400 MHz	dB/100m max.	43.7	
	Attenuation @ 500 MHz	dB/100m max.	49.3	
24	Return Loss @ 1 MHz	dB min.	19	
	Return Loss @ 10 MHz	dB min.	19	
	Return Loss @ 20 MHz	dB min.	17.5	
	Return Loss @ 100 MHz	dB min.	12	
	Return Loss @ 200 MHz	dB min.	9	
	Return Loss @ 250 MHz	dB min.	8	
	Return Loss @ 300 MHz	dB min.	7.2	
	Return Loss @ 400 MHz	dB min.	6	
	Return Loss @ 500 MHz	dB min.	6	
25	NEXT @ 1 MHz	dB min.	65	
	NEXT @ 10 MHz	dB min.	56.6	
	NEXT @ 20 MHz	dB min.	51.6	
	NEXT @ 100 MHz	dB min.	39.9	
	NEXT @ 200 MHz	dB min.	34.8	
	NEXT @ 250 MHz	dB min.	33.1	
	NEXT @ 300 MHz	dB min.	31.7	
	NEXT @ 400 MHz	dB min.	28.7	
	NEXT @ 500 MHz	dB min.	26.1	
26	Propogation delay	ns (max.)	490	
27	Propogation Skey delay	ns (max.)	45	

CAT7 F/FTP, CAT7 S/FTP & CAT7A S/FTP



S.NO.	PARAMETER	UNIT	CAT-7 CABLE		CAT-7A CABLE
			F/FTP	S/FTP	S/FTP
1	Application	-	Gigabit Ethernet 100 Base-T, 1000Base-T, 10 GBase-T		
2	Frequency Band	Mhz.	1-600		1-1000
3	Conductor	-	23AWG Solid Bare Copper		23AWG Solid Bare Copper
4	Insulation	-	SFS		SFS
5	Pair	-	4 Twisted Pair		4 Twisted Pair
6	Shielding	-	Overall Aluminum/ Polyester Foil	Overall Aluminum/ Polyester Foil	Overall Aluminum/ Polyester Foil
				& ATC Braiding	& ATC Braiding
			(Protection against EMI)	(Protection against EMI)	(Protection against EMI)
7	Sheath	-	PVC/LSZH		
8	Colour of Outer Sheath	-	Blue/Grey/Black		
9	Bending Radius at low temp	-	10 X Overall Diameter Of Cable		10 X Overall Diameter Of Cable
10	RoHS	-	Complaint		
11	Applicable Standards	-	Standard TIA/ EIA 568A.C2		Standard TIA/ EIA 568A.C2
12	High Voltage Test	1KV/1min	Withstood		Withstood
13	Temperature Range	-	-20°C to 70°C	-20°C to 75°C	-20°C to 90°C

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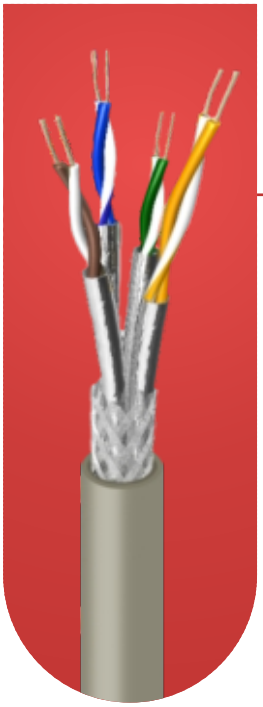
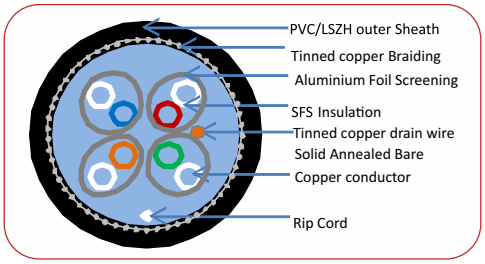


CAT7A S/FTP



ELECTRICAL SPECIFICATIONS

S.NO.	PARAMETER	UNIT	CAT-7 CABLE		CAT-7A CABLE
			F/FTP	S/FTP	S/FTP
14	NEXT @ 1 MHz	dB min.	78		78
	NEXT @ 4 MHz	dB min.	78		78
	NEXT @ 10 MHz	dB min.	78		78
	NEXT @ 16 MHz	dB min.	78		78
	NEXT @ 20 MHz	dB min.	78		78
	NEXT @ 100 MHz	dB min.	72.4		75.4
	NEXT @ 200 MHz	dB min.	67.9		72.2
	NEXT @ 250 MHz	dB min.	66.5		69.4
	NEXT @ 300 MHz	dB min.	65.3		68.2
	NEXT @ 400 MHz	dB min.	63.4		66.4
	NEXT @ 500 MHz	dB min.	61.9		64.3
	NEXT @ 600 MHz	dB min.	60.8		63.7
	NEXT @ 650 MHz	dB min.	-		63.2
	NEXT @ 750 MHz	dB min.	-		62.3
	NEXT @ 800 MHz	dB min.	-		61.9
	NEXT @ 900 MHz	dB min.	-		61.1
	NEXT @ 1000 MHz	dB min.	-		60.4

CAT5E UTP/SFTP PATCH CORD

Svarn solid conductor twisted-pair cables is simple, cost-effective and for high-speed transmission performance. Our cables support a higher signal-to-noise ratio and providing better reliability with higher data rates over local area Networks (LANs).

FEATURES

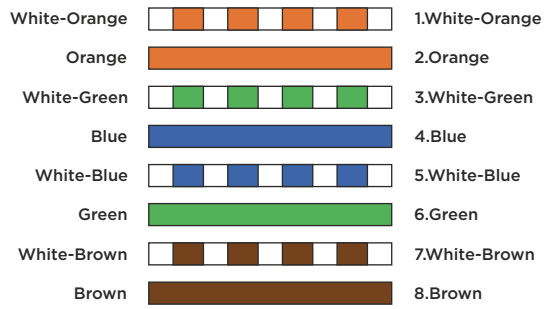
- 10BASE-T,100BASE-TX,1000BASE-T
- Temperature Rating : -15°C to +70°C
- UV Resistance
- RoHS Compliant

SPECIFICATIONS: CABLE

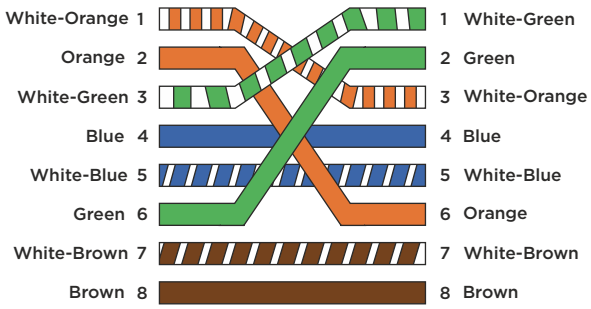
MECHANICAL	
Inner Conductor	24 AWG bare solid copper, 4 pair twisted
Insulation Material	Polyethylene
Insulation Dia.	1.04 ± 0.025
Sheath Color/Material	Black / PVC RoHS complied
Sheath Diameter	6.00 ± 0.5MM
Bending Radius	8 X Cable Diameter

ELECTRICAL	
Impedance @ 1 MHZ	100 ± 15
Capacitance	50 ± 5 NF/KM
Insulation resistance at 500 V	5000 M Ω/ KM (Min.)
Conductor Resistance at 20°C	9.38 Ω Max./100 M
HVT Test	1 KV DC

STRAIGHT



CROSS



For more information please contact: **Paresh Gupta** – paresh@svarn.com

CHANNEL TEST CONFIGURATION TRANSMISSION PARAMETERS AS PER ANSI/TIA-568-C.2

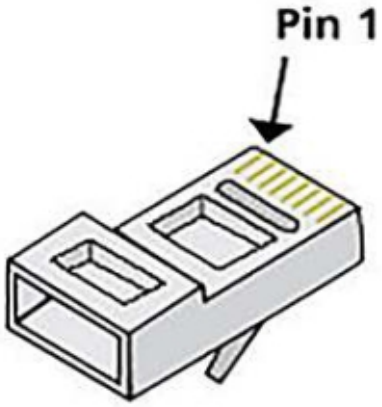
FREQUENCY (MHz)	ATTENUATION AT 20°C DB/100M MAXIMUM	RETURN LOSS AT 20°C MINIMUM IN DB	NEXT AT 20°C MINIMUM IN DB
1	3.0	17	60
10	7.1	17	47
20	10.2	17	42
62.5	18.6	12.1	33.6
100	24.0	10	30.1

MODULAR PLUG

ELECTRICAL SPECIFICATIONS	
Dielectric With Standing Voltage	1000V DC/Min., <0.5A
Insulation Resistance	500 M Ω
Contact Resistance	<20 M Ω
UL Applications	250 Volts AC Max at 2 Amps.

MECHANICAL SPECIFICATIONS	
Cable-To-Plug Tensile Strength	20lbs (89N) Min.
Insertion/ Extraction Life (Durability)	> 750 Mating Cycle

MATERIAL AND FINISH	
• **Plug Material/Housing**	
Material	Polycarbonate UL94V-0 or 94V-2
Finish	Transparent
• **Contact Material**	
Material	Copper Alloy
Finish	Gold
• **Shielded Shell**	
Material	Copper Alloy
Finish	Nickel Plated



RJ-45 Plug

CAT6 UTP/SFTP PATCH CORD

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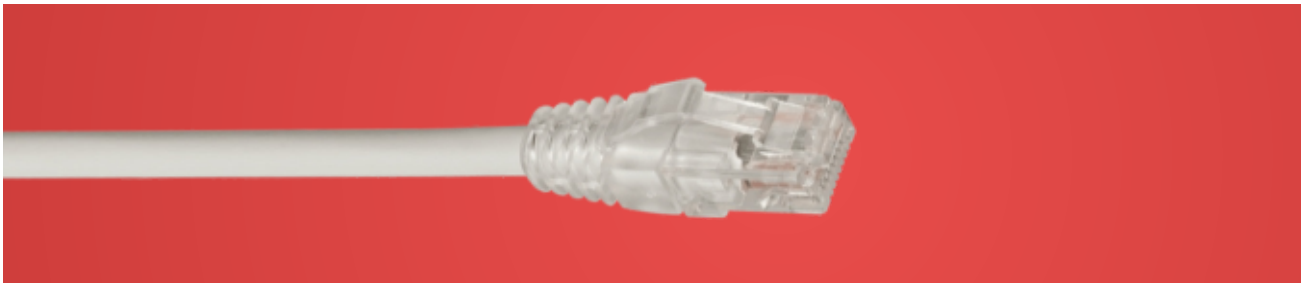
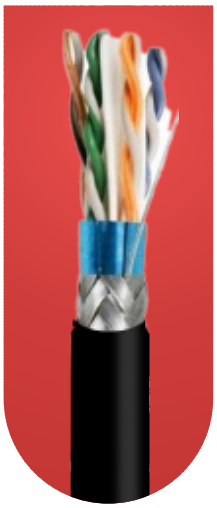


FEATURES

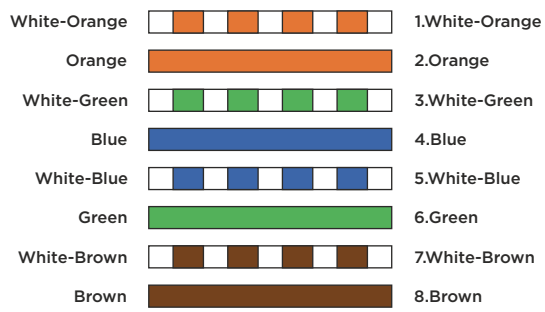
- 10BASE-T,100BASE-TX,1000BASE-T
- Temperature Rating : -15°C to +70°C
- UV Resistance
- RoHS Compliant



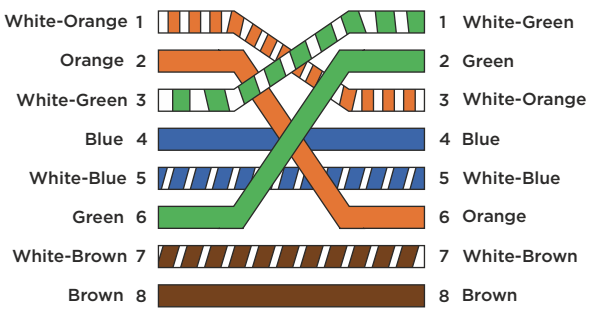
SPECIFICATIONS: CABLE

MECHANICAL	
Inner Conductor	23 AWG bare solid copper, 4 pair twisted
Insulation Material	High Density Polyethylene
Insulation Dia.	1.22 ± 0.05
Shielding	Aluminum Foil With Drain Wire
Braiding Coverage (Approx)	60%
Sheath Color/Material	Grey / PVC RoHS complied
Sheath Dia.	6.8 ± 0.5mm
Bending Radius	8X Cable Diameter
Temperature Range	-15°C to +70°C

STRAIGHT



CROSS



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ELECTRICAL	
Impedance @ 1 MHZ	100 ± 15
Capacitance	56 ± 5 NF/KM
Insulation resistance at 500 V	5000 M Ω/ KM (Min.)
Conductor Resistance at 20°C	7.5 Ω Max./100 M
HVT Test	1 KV DC
Flammability test as per IEC 60332	Uncharged Portion Minimum 50 MM

CHANNEL TEST CONFIGURATION TRANSMISSION PARAMETERS AS PER ANSI/TIA-568-C.2

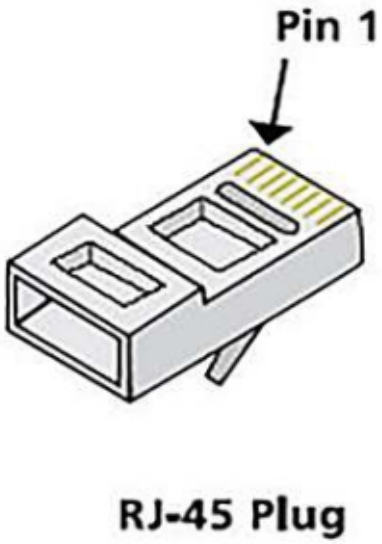
FREQUENCY (MHz)	ATTENUATION AT 20°C DB/100M MAXIMUM	RETURN LOSS AT 20°C MINIMUM IN DB	NEXT AT 20°C MINIMUM IN DB
1	3.0	19	65
10	6.3	19	56.6
20	9.0	17.5	51.6
100	21.3	12	39.9
200	31.5	9	34.8
250	35.9	8	33.1

MODULAR PLUG

ELECTRICAL SPECIFICATIONS	
Dielectric With Standing Voltage	1000V DC/Min., <0.5A
Insulation Resistance	500 M Ω
Contact Resistance	<20 M Ω
UL Applications	250 Volts AC Max at 2 Amps.

MECHANICAL SPECIFICATIONS	
Cable-To-Plug Tensile Strength	20lbs (89N) Min.
Insertion/ Extraction Life (Durability)	> 750 Mating Cycle

MATERIAL AND FINISH	
• **Plug Material/Housing**	
Material	Polycarbonate UL94V-0 or 94V-2
Finish	Transparent
• **Contact Material**	
Material	Copper Alloy
Finish	Gold
• **Shielded Shell**	
Material	Copper Alloy
Finish	Nickel Plated



RJ-45 Plug

CAT6A UTP/SFTP PATCH CORD

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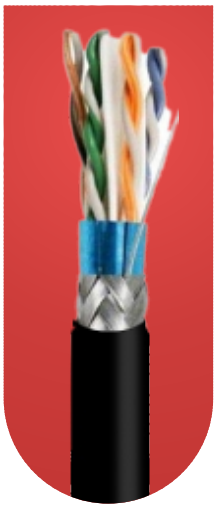
FEATURES

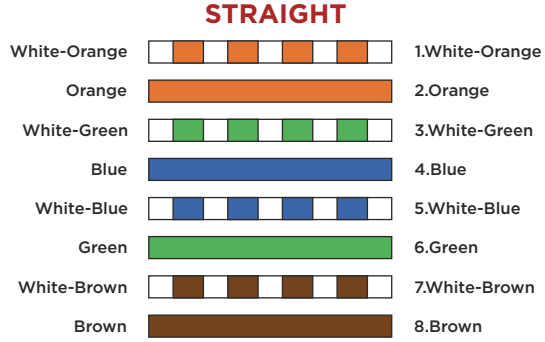
- 10BASE-T,100BASE-TX,1000BASE-T
- Temperature Rating : -15°C to +70°C
- UV Resistance
- RoHS Compliant



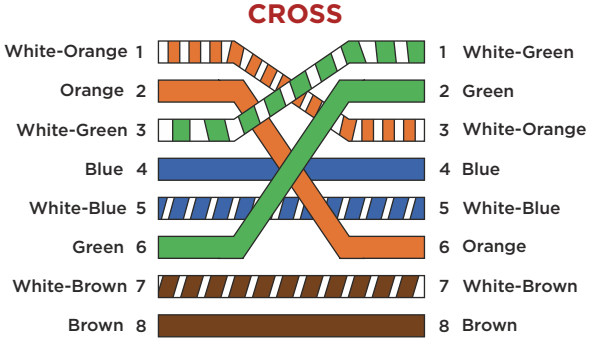
SPECIFICATIONS: CABLE

MECHANICAL	
Inner Conductor	23 AWG bare solid copper, 4 pair twisted
Insulation Material	High Density Polyethylene
Insulation Dia.	1.22 ± 0.05
Shielding	Aluminum Foil With Drain Wire
Braiding Coverage (Approx)	60%
Sheath Color/Material	Grey / PVC RoHS complied
Sheath Dia.	7.6 ± 0.5mm
Bending Radius	8X Cable Diameter
Temperature Range	-15°C to +70°C

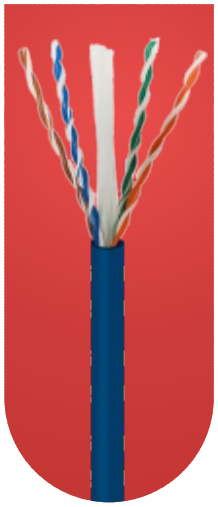
STRAIGHT



CROSS



For more information please contact: **Paresh Gupta** – paresh@svarn.com



ELECTRICAL	
Impedance @ 1 MHZ	100 ± 15
Capacitance	56 ± 5 NF/KM
Insulation resistance at 500 V	5000 M Ω/ KM (Min.)
Conductor Resistance at 20°C	7.5 Ω Max./100 M
HVT Test	1 KV DC
Flammability test as per IEC 60332	Uncharged Portion Minimum 50 MM

CHANNEL TEST CONFIGURATION TRANSMISSION PARAMETERS AS PER ANSI/TIA-568-C.2

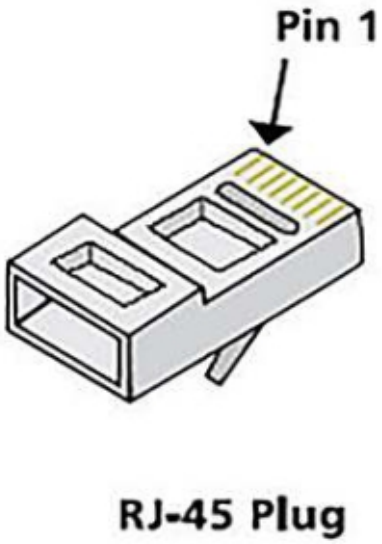
FREQUENCY (MHz)	ATTENUATION AT 20°C DB/100M MAXIMUM	RETURN LOSS AT 20°C MINIMUM IN DB	NEXT AT 20°C MINIMUM IN DB
1	3.0	19	65
10	6.3	19	56.6
20	9.0	17.5	51.6
100	21.3	12	39.9
200	31.5	9	34.8
250	35.9	8	33.1
300	37.4	7.2	31.7
400	43.7	6	28.7
500	49.3	6	26.1

MODULAR PLUG

ELECTRICAL SPECIFICATIONS	
Dielectric With Standing Voltage	1000V DC/Min., <0.5A
Insulation Resistance	500 M Ω
Contact Resistance	<20 M Ω
UL Applications	250 Volts AC Max at 2 Amps.

MECHANICAL SPECIFICATIONS	
Cable–To-Plug Tensile Strength	20lbs (89N) Min.
Insertion/ Extraction Life (Durability)	> 750 Mating Cycle

MATERIAL AND FINISH	
• **Plug Material/Housing**	
Material	Polycarbonate UL94V-0 or 94V-2
Finish	Transparent
• **Contact Material**	
Material	Copper Alloy
Finish	Gold
• **Shielded Shell**	
Material	Copper Alloy
Finish	Nickel Plated



RJ-45 Plug

QUALITY PAR EXCELLENCE

BHARAT (INDIA)

CORPORATE OFFICE
Plot No. 1, Site No. 1, 14/3, Mathura Road,
Faridabad – 121003, Haryana

WORKS

Haryana
74th Milestone, Delhi-Mathura Road,
Hodal Toll Plaza, Distt. Palwal–121005

Rajasthan
Plot No. SP5 – 249, 250, RIICO Industrial Area,
Ghiloth, Neemrana, Alwar – 301705

Maharashtra
Gat No. 153/1/1, Village Ambethan, Taluka Khed
(near Dwarka School), Pune – 410501

Uttarakhand
Plot No. 68, 69, 71, 72 & 73, Sector-5, IIE,
Sidcul, Haridwar–249403

ASIA

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Jababeka Industrial Estate 6, Jl. Samsung,
Block A 3A, Cikarang Utara 17530

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