Category 5e
Solutions

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Litech®

Category 5e**Cable**

Product Features

- UL vertified to TIA/EIA 568A & ISO/IEC 11801
- Conductor : Solid or Stranded Copper
- Insulation : Colour-coded PE
- Jacket : PVC or LSOH
- Flammability Grade : CMX, CM, MP, CMR, MPR
- Rated Temperature : 60°C
- Reelex Pull-Out Box Packing Available

Cable Construction

No of Pair	Color Of Pair	Conductor Diameter(mm)	Insulation Diameter(mm)	Shielding Thickness(mm)	Shielding Diameter(mm)
1	Blue White/Blue				
2	Orange White/Orange				
3	Green White/Green	7*0.2	0.95± 0.01	0.55± 0.05	5.6± 0.1
4	Brown White/Brown				

Electrical Characteristics (CAT 5e - AWG 24)

Frequency(MHz)	Impedance(MHz)	RL(dB)	Attenuation dB/100	Pair(dB)	Sum(dB)	Velocity Propagation
0.772		19.4	1.8	67.0	63.0	
1.0		20.0	2.0	65.3	60.8	
4.0		23.0	4.1	56.3	48.7	
8.0		24.5	5.8	51.8	42.7	
10.0	100 ± 15	25.0	6.5	50.3	40.8	0.65
16.0		25.0	8.2	47.3	36.7	
20.0		25.0	9.3	45.8	34.7	
25.0		24.3	10.4	44.3	32.8	
31.25		23.6	11.7	42.9	30.9	
62.5		21.5	17.0	38.4	24.8	
100.0		20.1	22.0	35.3	20.8	

Ordering Information

Part No.	Description
LTSS-CU5E-XX	UTP Cat 5e Cable
LTSS-FT5E-XX	FTP Cat 5e Cable
LTSS-ST5E-XX	S-FTP Cat 5e Cable



Category 5e**Cable Outdoor**

Product Features

- UL vertified to TIA/EIA 568A & ISO/IEC 11801
- Conductor : Solid or Stranded Copper
- Insulation : Colour-coded PE
- Jacket : PVC or LSOH
- Flammability Grade : CMX, CM, MP, CMR, MPR
- Rated Temperature : 60°C
- Reelex Pull-Out Box Packing Available

Cable Construction

No of Pair	Color Of Pair	Conductor Diameter(mm)	Insulation Diameter(mm)	Shielding Thickness(mm)	Shielding Diameter(mm)
1	Blue White/Blue				
2	Orange White/Orange				
3	Green White/Green	7*0.2	0.95± 0.01	0.55± 0.05	5.6± 0.1
4	Brown White/Brown				

Electrical Characteristics (CAT 5e - AWG 24)

Frequency(MHz)	Impedance(MHz)	RL(dB)	Attenuation dB/100	Pair(dB)	Sum(dB)	Velocity Propagation
0.772		19.4	1.8	67.0	63.0	
1.0		20.0	2.0	65.3	60.8	
4.0		23.0	4.1	56.3	48.7	
8.0		24.5	5.8	51.8	42.7	
10.0	100 ± 15	25.0	6.5	50.3	40.8	0.65
16.0		25.0	8.2	47.3	36.7	
20.0		25.0	9.3	45.8	34.7	
25.0		24.3	10.4	44.3	32.8	
31.25		23.6	11.7	42.9	30.9	
62.5		21.5	17.0	38.4	24.8	
100.0		20.1	22.0	35.3	20.8	



Ordering Information

Part No.	Description
LTSS-OU5E-XX	UTP Cat 5e Outdoor Cable
LTSS-OF5E-XX	FTP Cat 5e Outdoor Cable
LTSS-OS5E-XX	S-FTP Cat 5e Outdoor Cable

Category 5e**Patch Cord**

Litech Category 5e Patch Cord is a superior product delivering the best network performance when used in conjunction with other Category 5e products. The Patch Cord is constructed of high grade cable and quality RJ45 plugs. The RJ45 plugs are provided with a fully moulded boot and a moulded insert to ensure pair integrity. The fully moulded boot ensures excellent strain relief and together with the insert, ensures that performance is not degraded when using the Patch Cord. Patch Cords are available in multiple colours to help with circuit identification in the Cabinet/Rack.

Product Features

- Category 5e compliant
- High quality UTP/RJ45 Patch Cords
- Available in seven colours
- Fully moulded RJ45 plugs ensure stable performance
- Inserts to prevent performance degradation during manufacturing
- UL CMR fire rated jacketing
- PE insulation on conductors
- PVC outer jacket material
- ETL verified
- AS/NZS 3080: 2003 Class D.

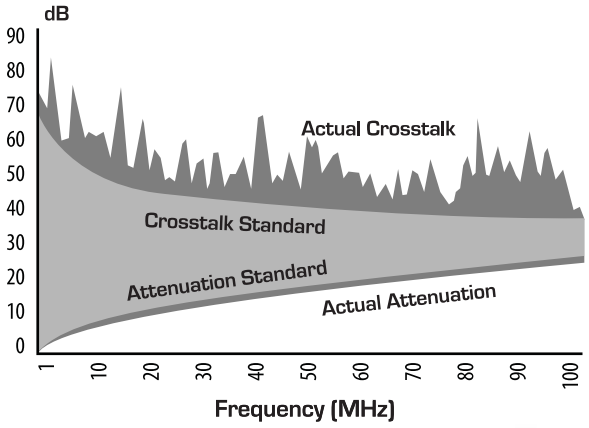
MECHANICAL CHARACTERISTICS

Cable

Gauge	24 AWG stranded copper wire
Pair Count	4 pair individually colour coded
Sequence	Wiring sequences in 568 A & B
Rated Temperature	60°C, 75°C

ELECTRICAL

Conductor Dimension (mm)	7/0.2
Conductor Insulation	Polyolefin
Core Dimension (mm)	0.98 ± 0.02
Nom O.D.(mm)	5.5 ± 0.02
Jacket Material	PVC



Technical Specifications

@100MHZ	Specification	Cat 5e Standard
Crosstalk (-DB) -2M	35.3	35.0
Crosstalk (-DB) -5M	35.1	34.7
Crosstalk (-DB) -10M	34.8	34.5
Return Loss (-DB)	20.0	18.0

Ordering Information

Part No.	Description
UTP Cat 5e Patchord	LTSS - PC5E - UXX - YY
FTP Cat 5e Patchord	LTSS - PC5E - FXX - YY

XX - Colour Boots — *White (W1), Grey (G2), Red (R3), Yellow (Y4), Green (E5), Blue (B6), Black (K7)*

YY - Cable Length — *0.5m, 1.0m, 1.5m, 2.0m, 3.0m, 5.0m*



Category 5e **Modular Jacks**

Litech range of products are the next generation of data communications solutions.These modular jacks are colour coded for both 568A and 568B standards and can be terminated using a Litech or Krone tool. Clear wire retaining caps are supplied and can be used to provide additional cable strain relief. Combined with other Litech Products, they are the perfect solution to your voice and data communications needs.

MECHANICAL CHARACTERISTICS

Modular Connector

RJ45 8-Pin Connector	FCC part 68, Subpart F and
	IEC-60603-7 compliant
Durability	750 insertion cycles min.
Material	Phosphor Bronze with 50
	microinchesof gold over 100
	micro inches nickel plating

Electrical Characteristics

Dielectric Strength	1,000V RMS at 60Hz for 1 minute
Current Rating	1.5Amp maximum
Insulation Resistance	500MΩ minimum
Contact Resistance	2mΩ per contact
Temperature Range	-10°C to +60°C
Transmission Performance	Exceeds ISO/IEC 11801 Class D
	AS/NZS 3080:2003 Class D

IDC Connector

IDC Connector	Insulation slicing of 22 to 24 AWG
	(0.64 to 0.41mm)
Insulation Diameter (Wire)	0.70 - 1.40mm
Durability	10 insertions of any combination
	of wire gauge - two wires per slot
Connector Material	Phosphor Bronze with nickel plating

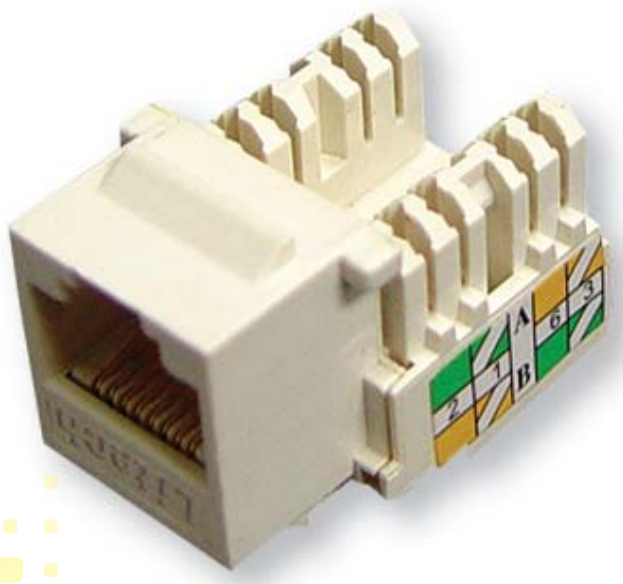
IDC Body & Cover Material Fire-Retardant, UL 94V-0, Plastic

Ordering Information

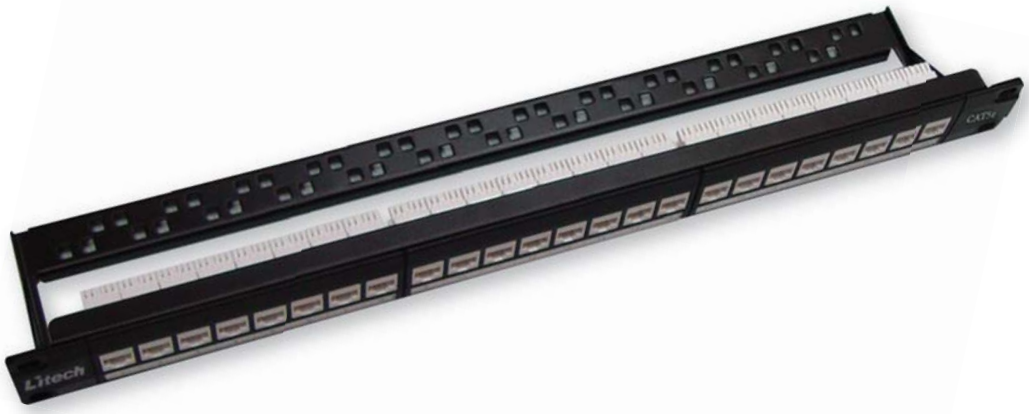
Part No.	Description
Cat 5e Modular Jack	LTSS - MJC5E - XX

Product Features

- Category 5e compliant
- High quality UTP/RJ45 Patch Cords
- Available in seven colours
- Fully moulded RJ45 plugs ensure stable performance
- Inserts to prevent performance degradation during manufacturing
- UL CMR fire rated jacketing
- PE insulation on conductors
- PVC outer jacket material
- ETL verified
- AS/NZS 3080: 2003 Class D.



Category 5e**PatchPanel**



Litech range of products are the next generation of data communications solutions. The Category 5e Patch Panels are a perfect combination of sleek looks and outstanding performance. They feature 24 individual Category 5e modular jacks that are colour coded for both 568A and 568B standards and can be terminated using a Litech or Krone tool. Clear wire retaining caps are supplied and can be used to provide additional cable strain relief. The sleek silver face of the product comprises three designation-strip holders with a label kit supplied. Rear cable management tray, velcro cable ties, cage nuts and screws are also provided with the product. Combined with other Litech Products, they are the perfect solution to your voice and data communications needs.

MECHANICAL CHARACTERISTICS

Modular Connector

Modular Connector	FCC part 68, Subpart F and
RJ45 8-Pin Connector	IEC-60603-7 compliant
	750 insertion cycles min.
Durability	Phosphor Bronze with 50
Material	microinchesof gold over 100
	microinches nickel plating

Electrical Characteristics

Dielectric Strength	1,000V RMS at 60Hz for 1minute
Current Rating	1.5Amp maximum
Insulation Resistance	10MΩ minimum
Contact Resistance	2mΩ per contact
Temperature Range	-10°C to +60°C
Transmission Performance	Exceeds ISO/IEC 11801 Class D
	AS/NZS 3080:2003 Class D

IDC Connector

IDC Connector	Insulation slicing of 22 to 24 AWG
	(0.64 to 0.41mm)
Insulation Diameter (Wire)	0.70 - 1.60mm
Durability	10 insertions of any combination of
	wire gauge - one wire per slot
Connector Material	Phosphor Bronze with nickel plating

IDC Body & Cover Material Fire-Retardant, UL 94V-0, Plastic

Product Features

- Aesthetic, contemporary design
- Powder-coated metal framework
- Universal colour-coding for 568A and 568B standards
- Removable rear cable management tray
- Compatible with standard 19" equipment frames
- IDC termination using Litech or Krone tool
- Fully compliant to AS/NZS 3080:2003, ISO/IEC 11801 Edition 2 2002 and ANSI/TIA/EIA- 568-B. Series Connecting Hardware Standards.

Ordering Information

Part No.	Description
Cat 5e 24 Port UTP Patch Panel - Shielded	LTSS - PPC5E - S24
Cat 5e 24 Port UTP Patch Panel - Unshielded	LTSS - PC5E - U24
Cat 5e 48 Port UTP Patch Panel - Shielded	LTSS - PPC5E - S48
Cat 5e 48 Port UTP Patch Panel - Unshielded	LTSS - PC5E - U48

Category 5e **Inline** Patch**Panel**



Litech range of 19" RJ45 Inline Patch Panel are design with superior performance and able to match any standard data products.The inline patch panel features individual plug in keystone modular jacks on standard 19" frame for improved performance consistency. The RJ45 jack to RJ 45 jack design eliminate the needs for timing consuming cable termination and use only standard factory per-terminated patchcords. Coupler with other Litech Category products, is the perfect solution to your data communications needs as well as for FE or GE application for mobile network applications.

Product Features

- Individual plug in modules feature eliminates PCB failure and Improved performance consistency
- Additional rear cable management and tie down bracket
- RJ45 Jack to RJ45 jack design eliminates needs for cable punching
- Standard 19" ETSI mounting
- Complied to ANSI/TIA-568-B.2-1 channel compliant, FCC part 68.5, subpart F compliant

Frequency (Mhz)	Attenuation (dB)	NEXT (dB)	RL (dB)	ELFEXT (dB)	PSELFEXT (dB)
1	1.9	80.6	26.8	81.3	74.5
4	3.8	70.7	33.7	70.3	63.6
8	5.4	69.5	30.4	62.4	58.0
10	6.1	59.2	28.8	59.8	56.0
16	7.7	56.0	29.2	53.9	51.3
20	8.7	54.2	38.5	51.7	49.4
25	9.8	54.3	25.5	48.9	46.3
31.25	11.0	49.4	24.2	46.5	43.7
32.5	15.8	43.8	28.5	38.1	37.1
100	20.3	42.0	20.2	35.7	34.7

Performance compliant with TIA-568B.2

Electrical Characteristics

Insulation Resistance	500 Mω.
Dielectric Withstanding	1000 V Ac.
Voltage	
Dc Current Rating	1.5 Amps.
Dc Resistance : 0.1ω.	0.1ω.
Contact Resistance	20mΩ.

Physical Characteristics

Coupler Housing	Polycarbonate Resin High-impact
	Ul94v-0 Thermoplastic
Contact Holder	Abs High-impact Ul94v-0 Thermoplastic
Spring Wire	Phosphor Bronze 5100w Temper
	Wire, =0.45mm,50u" Gold Over
	100u" Nickel Undercoat
Insertion Life	750 Mating Cycles With Fcc
Contact Force	Compliant Rj-45 Plug100 Grams
	With Fcc Compliant Rj-45 Plug
Plug Retention Force	11 Lbf Min.
Operating Temperature	-10°C To 60°C
Storage Temperature	-40°C To 68°C
Humidity	10%~90%rh.

Ordering Information

Part No.	Description
LTSS - IP5E - XX	19" RJ45 Cat5e Inline Patch Panel

Accesories

Litech provides varies types of workstation outlets to suit different countries standard. All faceplates are in slim and ergo-compact design with smooth and elegant finished surface.

Inline**Patch**Panel



Ordering Information

Part No.	Description
LTSS-IP5E-24	Cat 5e 24 Port UTP Inline Patch Panel



Cable**Management**Guide

Ordering Information

Part No.	Description
LTSS-MG-01P	Cable Management Guide 1U (Plastic Type)
LTSS-MG-01M	Cable Management Guide 1U (Metal Type)
LTSS-MG-02M	Cable Management Guide 2U (Metal Type)



Surface**Mount**Box

Ordering Information

Part No.	Description
LTSS-FPFO-N1	Floor Outlet Single Port
LTSS-FPFO-N2	Floor Outlet Dual Port

Face**Plate**

Ordering Information

Part No.	Description
LTSS-FPS1-01	S1 Style Face Plate Single Port
LTSS-FPS1-02	S1 Style Face Plate Dual Port





Ordering Information

Part No.	Description
LTSS-FPBS-01	BS Style Face Plate Single Port
LTSS-FPBS-02	BS Style Face Plate Dual Port

Ordering Information

Part No.	Description
LTSS-FPAS-01	US Style Face Plate Single Port
LTSS-FPAS-02	US Style Face Plate Dual Port
LTSS-FPAS-03	US Style Face Plate Three Port
LTSS-FPAS-04	US Style Face Plate Four Port




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