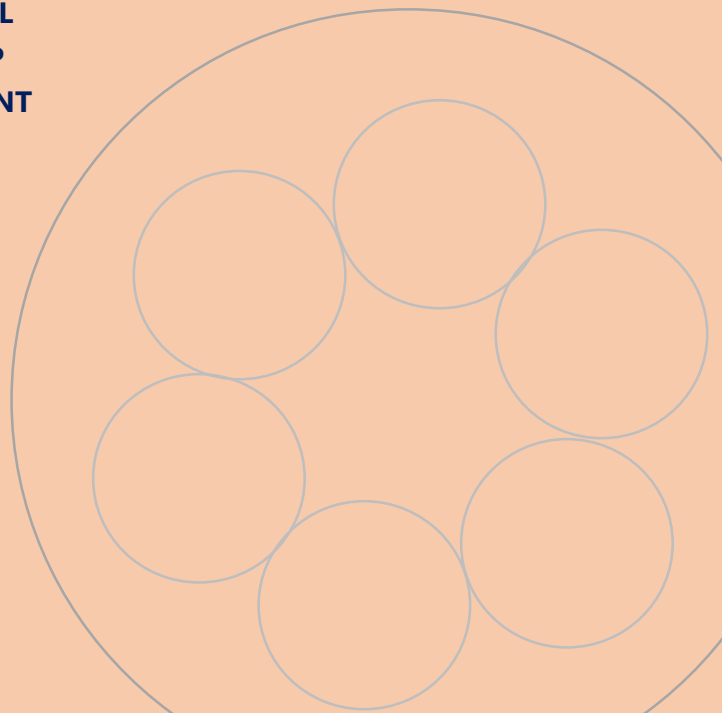


# COPPER SYSTEM

**ESCAB<sup>®</sup>**

## COPPER SYSTEM

- CATEGORY 5e SOLID CORE CABLE
- CATEGORY 6 SOLID CORE CABLE
- CATEGORY 6A SOLID CORE CABLE
- PATCH PANEL
- PATCH CORD
- JACK UTP STP
- VOICE GRADE SOLID CORE MULTIPAIR CABLE
- VOICE DISCONNECTION MODULES
- VOICE PATCH PANEL
- PLUG RJ45 UTP STP
- CABLE MANAGEMENT
- FACEPLATE



**CATEGORY.5E U/UTP PVC | LSHF | PE**

U-UTP



**Standard:**

- ANSI/TIA 568-C.2
- ISO/IEC 11801 ED.2
- CENELEC EN 50173-2
- CENELEC EN 50288-6-1
- IEC 60332-1

**Approved:** UL Listed, ETL Verified, EC Verified

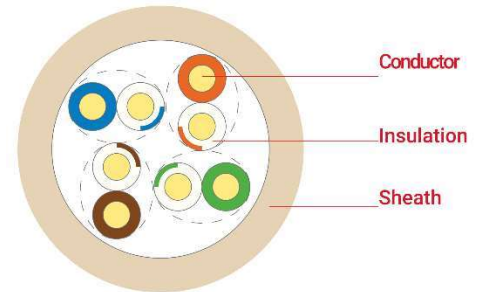
**Construction:**

- Conductor: Electronic solid copper
- Insulation: PE
- Others : Ripcord Nylon
- Outer sheath:
  - LSZH Low Smoke Zero Halogen (UL Non-Plenum) - (UL) CMP
  - PVC-FR Flame retardant - CMX(UL) c(UL) CMH
  - PE Polyethylene



**Application:**

- Smart Television communication, Internet system in home.
- Camera security IP system
- Telephone system
- Smart home system
- The cable are designed to use only in home, villas, apartment, office building, hospital, schools, government office.



**Standard: ( LSHF | Low Smoke Halogen Free )**

- Smoke Density: TS/BS/IEC/EN 61034-1+2
- Corrosive Gases Measurement: IEC 60754-2, BS/EN 50267
- Flame retardant: IEC 60332-1, IEC 60332-2

**Technical Properties (@ 20°C)**

- Temperature: -20°C ~ +75°C
- Minimum Bending Radius: 8 x Diameter

**Electrical Characteristics (@20°C):**

- Conductor Resistance: Max 9.38 Ohm/100m
- Conductor Resistance Unbalance: Max 3%
- Dielectric Strength: 2.5kV dc or 0.75kV ac for 2 second
- Insulation Resistance: >150MΩ @ 100-500 V test voltage
- Capacitance Unbalance to Earth: Max 160pF/100m
- Skew: 20nsec/100m @100MHz
- Characteristic Impedance: 100 Ω +/- 3 Ohm @ 100MHz
- Transfer Impedance: 30mΩ/m@10MHz (ISO61156 grade 2)
- Velocity of Propagation: 440nsec/100m @100MHz (NVP for hand held testers = 0.80)

ESCAB Order No.	Cable Type	Outer Diameter (mm)	Color	Packing Standard (per reel)	Origin Availability
E5010EC01	ESCAB CAT5e UTP 4x2x24AWG/1 ECO PVCFR	5,10	Grey	305M	Asia/EU
E5010EC12	ESCAB CAT5e UTP 4x2x24AWG/1 ECO LSHF	5,10	Green	305M	Asia/EU
E5010EC13	ESCAB CAT5e UTP 4x2x24AWG/1 ECO PE	5,20	Black	305M	Asia/EU

# CATEGORY.5E F/UTP PVC | LSHF | PE

F-UTP



**Standard:**

- ANSI/TIA 568-C.2
- ISO/IEC 11801 ED.2
- CENELEC EN 50173-2
- CENELEC EN 50288-6-1
- IEC 60332-1

**Approved:** UL Listed, ETL Verified, EC Verified

**Construction:**

- Conductor: Electronic solid copper
- Insulation: PE
- Outer sheath:
  - LSZH Low Smoke Zero Halogen (UL Non-Plenum) - (UL) CMP
  - PVC-FR Flame retardant - CMX(UL) c(UL) CMH
  - PE Polyethylene



**Application:**

- Smart Television communication, Internet system in home.
- Camera security IP system
- Telephone system
- Smart home system
- The cable are designed to use only in home, villas, apartment, office building, hospital, schools, government office.

**Standard: ( LSHF | Low Smoke Halogen Free )**

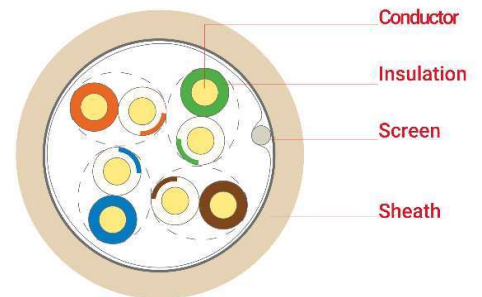
- Smoke Density: TS/BS/IEC/EN 61034-1+2
- Corrosive Gases Measurement: IEC 60754-2 , BS/EN 50267
- Flame retardant: IEC 60332-1, IEC 60332-2

**Technical Properties (@ 20°C)**

- Temperature: -20°C ~ +75°C
- Minimum Bending Radius: 8 x Diameter

**Electrical Characteristics (@20°C):**

- Conductor Resistance: Max 9.38 Ohm/100m
- Conductor Resistance Unbalance: Max 3%
- Dielectric Strength: 2.5kV dc or 0.75kV ac for 2 second
- Insulation Resistance: >150MΩ @ 100-500 V test voltage
- Capacitance Unbalance to Earth: Max 160 pF/100m
- Skew: 20nsec/100m @100MHz
- Characteristic Impedance: 100 Ω +/- 3 Ohm @ 100MHz
- Transfer Impedance: 30mΩ/m@10MHz (ISO61156 grade 2)
- Velocity of Propagation: 440nsec/100m @100MHz (NVP for hand held testers = 0.80)



**Order Information:**

ESCAB Order No.	Cable Type	Outer Diameter (mm)	Color	Packing Standard (per reel)	Origin Availability
E5011SD01	ESCAB CAT5e F-UTP 4x2x24AWG/1 STD PVC	5,20	Grey	305M	Asia/EU
E5011SD12	ESCAB CAT5e F-UTP 4x2x24AWG/1 STD LSHF	5,20	Grey	305M	Asia/EU
E5011SD13	ESCAB CAT5e F-UTP 4x2x24AWG/1 STD PE	5,30	Black	305M	Asia/EU

# CATEGORY.6 U/UTP ECO PVC | LSHF | PE

## U-UTP



### Standard:

- ANSI/TIA 568-C.2
- ISO/IEC 11801 ED.2
- CENELEC EN 50173-2
- CENELEC EN 50288-6-1
- IEC 60332-1

**Approved:** UL Listed, ETL Verified, EC Verified

### Construction:

- Conductor: Electronic solid copper
- Insulation: HDPE
- Star shaped pair separator
- Outer sheath:
  - LSZH Low Smoke Zero Halogen (UL Non-Plenum) - (UL) CMP
  - PVC-FR Flame retardant - CMX(UL) c(UL) CMH
  - PE Polyethylene



### Application:

- Smart Television communication, Internet system in home.
- Camera security IP system
- Telephone system, Smart home system
- 250 MHz UTP data for 10 Base-T, 100 Base-T, 1000 Base-T, ATM and FDDI.

### Standard: (LSHF | Low Smoke Halogen Free)

- Smoke Density: TS/BS/IEC/EN 61034-1+2
- Corrosive Gases Measurement: IEC 60754-2 , BS/EN 50267
- Flame retardant: IEC 60332-1, IEC 60332-2

### Technical Properties (@ 20°C)

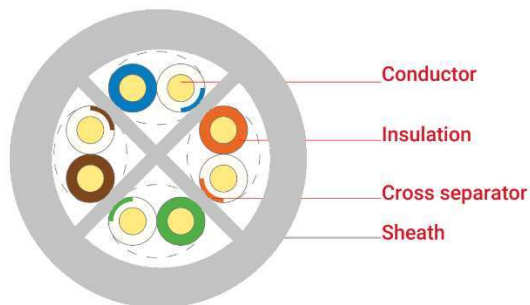
- Temperature: -20°C ~ +75°C
- Minimum Bending Radius: 8 x Diameter

### Electrical Characteristics (@20°C):

- |                                   |                                     |
|-----------------------------------|-------------------------------------|
| • Conductor Resistance:           | Max 9.38 Ohm/Km                     |
| • Conductor Resistance Unbalance: | Max 3%                              |
| • Dielectric Strength:            | 2.5kV dc or 0.75kV ac for 2 seconds |
| • Operation voltage               | 80V (max 120V for 23AWG)            |
| • Insulation Resistance:          | >150MΩ @ 100-500 V test voltage     |
| • Capacitance Unbalance to Earth: | Max 160 pF/100m                     |
| • Mutual Capacitance              | Max 5600 pF/100m                    |
| • Skew:                           | 20nsec/100m @100MHz                 |
| • Characteristic Impedance:       | 100 Ω +/- 3 Ohm @ 100MHz            |

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ESCAB CAT.6 U/UTP ECO 4 x 2 x 24AWG



Order Information:

ESCAB Order No.	Cable Type	Outer Diameter (mm)	Color	Packing Standard (per box)	Origin Availability
E6010EC01	ESCAB CAT6 UTP 4x2x24AWG/1 ECO PVC-FR	6,00	Grey	305M	Asia/EU
E6010EC12	ESCAB CAT6 UTP 4x2x24AWG/1 ECO LSHF	6,00	Blue	305M	Asia/EU

Transmission performance							
Frequency (MHz)	Max. Attenuations (dB/100m)	Min. Return Loss (dB)(SRL)	Min. Near and Cross talk (dB) (NEXT)	Delay (≤ns)	PSNEXT (≥dB)	ACRF [ELFEXT] (≥dB)	PSACRF (≥dB)
1	2.0*	20	74.3*	570	72.3	67.8	64.8
4	3.8*	23	65.3*	552	63.3	55.8	52.8
8	5.3*	24.5	60.8*	547	58.8	49.7	46.7
10	6.0*	25	59.3*	545	57.3	47.8	44.8
16	7.6*	25	56.2*	543	54.2	43.7	40.7
20	8.5*	25	54.8*	542	52.8	41.8	38.8
25	9.5*	24.3	53.3*	541	51.3	39.8	36.8
31.25	10.7*	23.6	51.9*	540	49.9	37.9	34.9
62.5	15.4*	21.5	47.9*	539	45.4	31.9	28.9
100	19.8*	20.1	44.3*	538	42.3	27.8	24.8
200	29.0*	18.6	39.8*	537	37.8	21.8	18.8
250	32.8*	17.3	38.3*	536	36.3	19.8	16.8

NOTED: The asterisked (\*) value are for information only. The minimum Next coupling loss for any pair combination at room temperature is to be greater than the value determined using the formula:  $NEXT(f \text{ MHz}) \geq NEXT(0.772) - 15 \log_{10}(f \text{ MHz}/0.772) \text{ dB}$



**CATEGORY.6 U/UTP STD PVC | LSHF | PE**



**U-UTP**

**Standard:**

- ANSI/TIA 568-C.2
- ISO/IEC 11801 ED.2
- CENELEC EN 50173-2
- CENELEC EN 50288-6-1
- IEC 60332-1

**Approved:** UL Listed, ETL Verified, EC Verified

**Construction:**

- Conductor: Electronic solid copper
- Insulation: HDPE
- Star shaped pair separator
- Outer sheath:
  - LSZH Low Smoke Zero Halogen (UL Non-Plenum) - (UL) CMP
  - PVC-FR Flame retardant - CMX(UL) c(UL) CMH
  - PE Polyethylene



**Application:**

- Smart Television communication, Internet system in home.
- Camera security IP system
- Telephone system, Smart home system
- 250 MHz UTP data for 10 Base-T, 100 Base-T, 1000 Base-T, ATM and FDDI.

**Standard: (LSHF | Low Smoke Halogen Free)**

- Smoke Density: TS/BS/IEC/EN 61034-1+2
- Corrosive Gases Measurement: IEC 60754-2, BS/EN 50267
- Flame retardant: IEC 60332-1, IEC 60332-2

**Technical Properties (@ 20°C)**

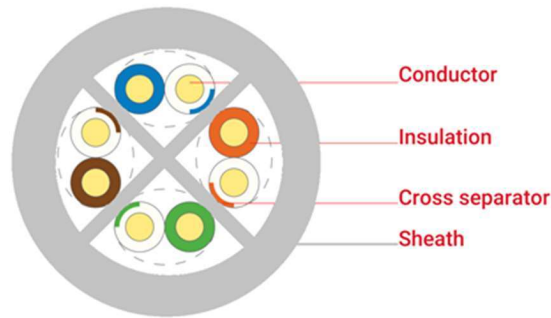
- Temperature: -20°C ~ +75°C
- Minimum Bending Radius: 8 x Diameter

**Electrical Characteristics (@20°C):**

- |                                   |                                     |
|-----------------------------------|-------------------------------------|
| • Conductor Loop Resistance:      | Max 9.38 Ohm/Km                     |
| • Conductor Resistance Unbalance: | Max 3%                              |
| • Dielectric Strength:            | 2.5kV dc or 0.75kV ac for 2 seconds |
| • Operation voltage               | 80V (max 120V for 23AWG)            |
| • Insulation Resistance:          | >150MΩ @ 100-500 V test voltage     |
| • Capacitance Unbalance to Earth: | Max 160 pF/100m                     |
| • Mutual Capacitance              | Max 5600 pF/100m                    |
| • Skew:                           | 20nsec/100m @100MHz                 |
| • Characteristic Impedance:       | 100 Ω +/- 3 Ohm @ 100MHz            |



ESCAB CAT.6 U/UTP STD 4 x 2 x 23AWG



Order Information:

ESCAB Order No.	Cable Type	Outer Diameter (mm)	Color	Packing Standard (per box)	Origin Availability
E6010SD01	ESCAB CAT6 UTP 4x2x23AWG/1 STD PVC-FR	6,10	Grey	305M	Asia/EU
E6010SD12	ESCAB CAT6 UTP 4x2x23AWG/1 STD LSHF	6,10	Blue	305M	Asia/EU
E6010SD13	ESCAB CAT6 UTP 4x2x23AWG/1 STD PE	6,20	Black	305M	Asia/EU

Transmission performance

Frequency (MHz)	Max. Attenuations (dB/100m)	Min. Return Loss (dB)(SRL)	Min. Near and Cross talk (dB) (NEXT)	Delay (≤ns)	PSNEXT (≥dB)	ACRF [ELFEXT] (≥dB)	PSACRF (≥dB)
1	2.0*	20	74.3*	570	72.3	67.8	64.8
4	3.8*	23	65.3*	552	63.3	55.8	52.8
8	5.3*	24.5	60.8*	547	58.8	49.7	46.7
10	6.0*	25	59.3*	545	57.3	47.8	44.8
16	7.6*	25	56.2*	543	54.2	43.7	40.7
20	8.5*	25	54.8*	542	52.8	41.8	38.8
25	9.5*	24.3	53.3*	541	51.3	39.8	36.8
31.25	10.7*	23.6	51.9*	540	49.9	37.9	34.9
62.5	15.4*	21.5	47.9*	539	45.4	31.9	28.9
100	19.8*	20.1	44.3*	538	42.3	27.8	24.8
200	29.0*	18.6	39.8*	537	37.8	21.8	18.8
250	32.8*	17.3	38.3*	536	36.3	19.8	16.8

NOTED: The asterisked (\*) value are for information only. The minimum Next coupling loss for any pair combination at room temperature is to be greater than the value determined using the formula:  $NEXT(f\text{ MHz}) \geq NEXT(0.772) - 1.5 \log_{10}(f\text{ MHz}/0.772)\text{dB}$



**CATEGORY.6 F/UTP**

**PVC | LSHF | PE**

F-UTP



**Standard:**

- ANSI/TIA 568-C.2
- ISO/IEC 11801 ED.2
- CENELEC EN 50173-2
- CENELEC EN 50288-6-1
- IEC 60332-1

**Approved:** UL Listed, ETL Verified, EC Verified

**Construction:**

- Conductor: Electronic solid copper
- Insulation: HDPE
- Star shaped pair separator
- Overall AL Foil screen
- Outer sheath:
  - LSZH Low Smoke Zero Halogen (UL Non-Plenum) - (UL) CMP
  - PVC-FR Flame retardant - CMX(UL) c(UL) CMH
  - PE Polyethylene



**Application:**

- Smart Television communication, Internet system in home.
- Camera security IP system
- Telephone system, Smart home system
- 250 MHz UTP data for 10 Base-T, 100 Base-T, 1000 Base-T , ATM and FDDI.

**Standard: (LSHF | Low Smoke Halogen Free)**

- Smoke Density: TS/BS/IEC/EN 61034-1+2
- Corrosive Gases Measurement: IEC 60754-2 , BS/EN 50267
- Flame retardant: IEC 60332-1, IEC 60332-2

**Technical Properties (@ 20°C)**

- Temperature: -20°C ~ +75°C
- Minimum Bending Radius: 8 x Diameter

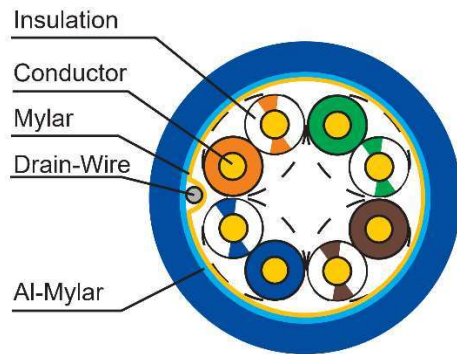
**Electrical Characteristics (@20°C):**

- |                                   |                                     |
|-----------------------------------|-------------------------------------|
| • Conductor Loop Resistance:      | Max 9.38 Ohm/Km                     |
| • Conductor Resistance Unbalance: | Max 3%                              |
| • Dielectric Strength:            | 2.5kV dc or 0.75kV ac for 2 seconds |
| • Operation voltage               | 80V (max 120V for 23AWG)            |
| • Insulation Resistance:          | >150MΩ @ 100-500 V test voltage     |
| • Capacitance Unbalance to Earth: | Max 160 p/100m                      |
| • Mutual Capacitance              | Max 5600 pF/100m                    |
| • Skew:                           | 20nsec/100m @100MHz                 |
| • Characteristic Impedance:       | 100 Ω +/- 3 Ohm @ 100MHz            |





ESCAB CAT.6 F/UTP 4 x 2 x 23AWG HPS



Order Information:

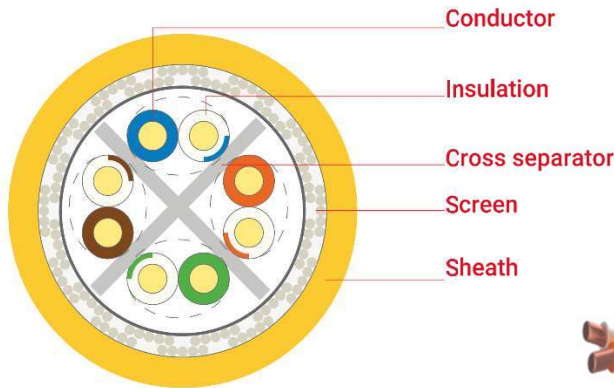
ESCAB Order No.	Cable Type	Outer Diameter (mm)	Color	Packing Standard (per reel)	Origin Availability
E6011-HP01	ESCAB CAT6 F-UTP 4x2x23AWG/1 HPS PVC-FR	7,10	Green	500M	Asia/EU
E6011-HP12	ESCAB CAT6 F-UTP 4x2x23AWG/1 HPS LSHF	7,15	Green	500M	Asia/EU
E6011-HP13	ESCAB CAT6 F-UTP 4x2x23AWG/1 HPS PE	7,20	Black	500M	Asia/EU

Transmission performance							
Frequency (MHz)	Max. Attenuations (dB/100m)	Min. Return Loss (dB)(SRL)	Min. Near and Cross talk (dB) (NEXT)	Delay (≤ns)	PSNEXT (≥dB)	ACRF [ELFEXT] ≥dB)	PSACRF ≥dB)
1	2.0*	20	74.3*	570	72.3	67.8	64.8
4	3.8*	23	65.3*	552	63.3	55.8	52.8
8	5.3*	24.5	60.8*	547	58.8	49.7	46.7
10	6.0*	25	59.3*	545	57.3	47.8	44.8
16	7.6*	25	56.2*	543	54.2	43.7	40.7
20	8.5*	25	54.8*	542	52.8	41.8	38.8
25	9.5*	24.3	53.3*	541	51.3	39.8	36.8
31.25	10.7*	23.6	51.9*	540	49.9	37.9	34.9
62.5	15.4*	21.5	47.9*	539	45.4	31.9	28.9
100	19.8*	20.1	44.3*	538	42.3	27.8	24.8
200	29.0*	18.6	39.8*	537	37.8	21.8	18.8
250	32.8*	17.3	38.3*	536	36.3	19.8	16.8

NOTED: The asterisked (\*) value are for information only. The minimum Next coupling loss for any pair combination at room temperature is to be greater than the value determined using the formula:  $NEXT(f\text{ MHz}) \geq NEXT(0.772) - 15 \log_{10}(f\text{ MHz}/0.772)\text{dB}$



# CATEGORY.6 SF-UTP LSHF



## SF-UTP

### Standard:

- ANSI/TIA 568-C.2
- ISO/IEC 11801 ED.2
- CENELEC EN 50173-1,2
- CENELEC EN 50288-5-1
- IEC 60332-1

**Approved:** UL Listed, ETL Verified

### Construction:

- Conductor: Electronic solid copper 23AWG solid
- Insulation: High-density polyethylene (HDPE)
- Star shaped pair separator
- Overall screen shielded: 100% Aluminum foil coverage with 30% Tinned copper braiding coverage
- Outer sheath: LSZH Low Smoke Zero Halogen (UL-CMP) Yellow color

### Application:

- Smart Television communication, Internet system in home.
- Camera security IP system
- Telephone system, Smart home system
- 250 MHz UTP data for 10 Base-T, 100 Base-T, 1000 Base-T, ATM 155 and FDDI.
- TP-PMD (ANSI X3T9.5)
- 100Mbps CDDI

### Standard: (LSHF | Low Smoke Halogen Free)

- Smoke Density: TS/BS/IEC/EN 61034-1+2
- Corrosive Gases Measurement: IEC 60754-2, BS/EN 50267
- Flame retardant: IEC 60332-1, IEC 60332-2

### Technical Properties (@ 20°C)

- Temperature: -20°C ~ +75°C
- Minimum Bending Radius: 8 x Diameter
- Maximum tensile load: 100N (installation)

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**Electrical Characteristics (@20°C):**

- Conductor Loop Resistance: Max 9.38 Ohm/Km
- Conductor Resistance Unbalance: Max 3%
- Dielectric Strength: 2.5kV dc or 0.75kV ac for 2second
- Spark test: 2000 +/- 250V AC
- Operation voltage: 80V (max 120V for 23AWG)
- Insulation Resistance: >150MΩ @ 100-500 V test voltage
- Capacitance Unbalance to Earth: Max 160 pF/100m
- Skew: 20nsec/100m @100MHz
- Characteristic Impedance: 100 Ω +/- 3 Ohm @ 100MHz
- Transfer Impedance: 30mΩ/m@10MHz (ISO61156 grade 2)
- Velocity of Propagation: 537nsec/100m @100MHz (NVP 67-69%)

**Order Information:**

ESCAB Order No.	Cable Type	Outer Diameter (mm)	Color	Packing Standard (per reel)	Origin Availability
E601X-HP12	ESCAB CAT6 SF/UTP 4x2x23AWG/1 HPS LSHF	7,40	Yellow	500M	Asia/EU
E601X-HP13	ESCAB CAT6 SF/UTP 4x2x23AWG/1 HPS PE	7,40	Black	500M	Asia/EU

TRANSMISSION PERFORMANCE acc. to ANSI/TIA-568.2-D Cat 6 (at 20 °C)									
Freq. (MHz)	NEXT (dB)	PS-NEXT (dB)	ACRF [ELFEXT] (dB)	PS-ACRF (dB)	PS-ANEXT (dB)	PS-AACRF (dB)	Return Loss (dB)	Insertion Lost (dB)	Propagation Delay (ns/100m)
	min.	min.	min.	min.	min.	min.	min.	min.	max.
1	74.3	72.3	67.8	64.8	67	67	20	2.1	570
4	65.3	63.3	55.8	52.8	67	66.2	23	3.8	552
8	60.8	58.8	49.7	46.7	67	60.1	24.5	5.3	547
10	59.3	57.3	47.8	44.8	67	58.2	25	6.0	545
16	56.2	54.2	43.7	40.7	67	54.1	25	7.6	543
20	54.8	52.8	41.8	38.8	67	52.2	25	8.5	542
25	53.3	51.3	39.8	36.8	67	50.2	24.3	9.5	541
31.25	51.9	49.9	37.9	34.9	67	48.3	23.6	10.7	540
62.5	47.4	45.4	31.9	28.9	65.6	42.3	21.5	15.4	539
100	44.3	42.3	27.8	24.8	62.5	38.2	20.1	19.8	538
200	39.8	37.8	21.8	18.8	58	32.2	18	29.0	537
250	38.3	36.3	19.8	16.8	56.5	30.2	17.3	32.8	536



# CATEGORY 6A U/FTP LSHF



U-FTP



**Standard:**

- ANSI/TIA 568-C.2
- ISO/IEC 11801 ED.2
- CENELEC EN 50173-1,2
- CENELEC EN 50288-10-1
- IEC 60332-1, IEC 61165-5

**Approved:** UL Listed, ETL Verified

**Construction:**

- Conductor: Electronic solid copper 23AWG solid
- Insulation: High-density polyethylene (HDPE)
- AL-Pet tape 100% coverage each pair
- Tinned copper drain wire 28AWG
- Outer sheath: LSZH Low Smoke Zero Halogen (UL-CMP) Blue color

**Application:**

- Smart Television communication, Internet system in home.
- Camera security IP system
- Telephone system, Smart home system
- 500 MHz data for 10 Base-T, 100 Base-T, 1000 Base-T, ATM 155 and FDDI. (IEEE 802.3)
- TP-PMD (ANSI X3T9.5)
- 10Gbit/s Ethernet
- 100Mbps CDDI
- Power over Ethernet (PoE) / PoE+

**Standard: (LSHF | Low Smoke Halogen Free)**

- Smoke Density: TS/BS/IEC/EN 61034-1+2
- Corrosive Gases Measurement: IEC 60754-2 , BS/EN 50267
- Flame retardant: IEC 60332-1, IEC 60332-2

**Technical Properties (@ 20°C)**

- Temperature: -20°C ~ +75°C
- Minimum Bending Radius: 8 x Diameter
- Maximum tensile load: 100N (installation)



**Electrical Characteristics (@20°C):**

- Conductor Resistance: Max 9.38 Ohm/Km
- Conductor Resistance Unbalance: Max 2%
- Dielectric Strength: 2.5kV dc or 0.75kV ac for 2second
- Spark test: 2000 +/- 250V AC
- Operation voltage: 80V (max 120V for 23AWG)
- Insulation Resistance: >150 MOhm @ 100-500 V test voltage
- Capacitance: Nom 42pF/m
- Capacitance Unbalance to Earth: Max 160 pF/100m
- Velocity of propagation: 78-80%
- Skew: 25nsec/100m @100MHz
- Characteristic Impedance: 100 Ω +/- 3 Ohm @ 100MHz
- Transfer Impedance: 30mΩ/m@10MHz (ISO61156 grade 2)
- Propagation delay: 430nsec/100m @100MHz (NVP 78-80%)

ESCAB Order No.	Cable Type	Outer Diameter (mm)	Color	Packing Standard (per reel)	Origin Availability
E6A10-HP01	ESCAB CAT6A U/FTP HPS 500MHz 4x2x23AWG/1 PVC	7,10	Blue	500M	Asia/EU
E6A10-HP12	ESCAB CAT6A U/FTP HPS 500MHz 4x2x23AWG/1 LSHF	7,10	Blue	500M	Asia/EU
E6A10-HP13	ESCAB CAT6A U/FTP HPS 500MHz 4x2x23AWG/1 PE	7,20	Black	500M	Asia/EU

TRANSMISSION PERFORMANCE acc. to ANSI/TIA-568-C.2 Cat 6A (at 20 °C)									
Freq. (MHz)	NEXT (dB)	PS-NEXT (dB)	ACRF [ELFEXT] (dB)	PS-ACRF (dB)	PS-ANEXT (dB)	PS-AACRF (dB)	Return Loss (dB)	Insertion Lost (dB)	Propagation Delay (ns/100m)
	min.	min.	min.	min.	min.	min.	min.	min.	max.
1	74.3	72.3	67.8	64.8	67	67	20	2.1	570
4	65.3	63.3	55.8	52.8	67	66.2	23	3.8	552
8	60.8	58.8	49.7	46.7	67	60.1	24.5	5.3	547
10	59.3	57.3	47.8	44.8	67	58.2	25	5.9	545
16	56.2	54.2	43.7	40.7	67	54.1	25	7.5	543
20	54.8	52.8	41.8	38.8	67	52.2	25	8.4	542
25	53.3	51.3	39.8	36.8	67	50.2	24.3	9.4	541
31.25	51.9	49.9	37.9	34.9	67	48.3	23.6	10.5	540
62.5	47.4	45.4	31.9	28.9	65.6	42.3	21.5	15	539
100	44.3	42.3	27.8	24.8	62.5	38.2	20.1	19.1	538
200	39.8	37.8	21.8	18.8	58	32.2	18	27.6	537
250	38.3	36.3	19.8	16.8	56.5	30.2	17.3	31.1	536
300	37.1	35.1	18.3	15.3	55.3	28.7	16.8	34.3	536
400	35.3	33.3	15.8	12.8	53.5	26.2	15.9	40.1	536
500	33.8	31.8	13.8	10.8	52	24.2	15.2	45.3	536



# CATEGORY 6A S/FTP LSHF



S-FTP



**Standard:**

- ANSI/TIA 568-C.2
- ISO/IEC 11801 ED.2
- CENELEC EN 50173-1,2
- CENELEC EN 50288-10-1
- IEC 60332-1, IEC 61165-5

**Approved factory:** UL Listed, ETL Verified

**Construction:**

- Conductor: Electronic solid copper 23AWG solid
- Insulation: High-density polyethylene (HDPE)
- AL-Pet tape 100% coverage each pair
- Tinned copper drain wire 28AWG
- Outer sheath: LSZH Low Smoke Zero Halogen Grey color

**Application:**

- Smart Television communication, Internet system in home.
- Camera security IP system
- Telephone system, Smart home system
- 500 MHz data for 10 Base-T, 100 Base-T, 1000 Base-T, ATM 155 and FDDI. (IEEE 802.3)
- TP-PMD (ANSI X3T9.5)
- 10Gbit/s Ethernet
- 100Mbps CDDI
- Power over Ethernet (PoE) / PoE+

**Standard: (LSHF | Low Smoke Halogen Free)**

- Smoke Density: TS/BS/IEC/EN 61034-1+2
- Corrosive Gases Measurement: IEC 60754-2 , BS/EN 50267
- Flame retardant: IEC 60332-1, IEC 60332-2

**Technical Properties (@ 20°C)**

- Temperature: -20°C ~ +75°C
- Minimum Bending Radius: 8 x Diameter
- Maximum tensile load: 100N (installation)

escab

**Electrical Characteristics (@20°C):**

- Conductor Resistance: Max 9.38 Ohm/Km
- Conductor Resistance Unbalance: Max 2%
- Dielectric Strength: 2.5kV dc or 0.75kV ac for 2second
- Spark test: 2000 +/- 250V AC
- Operation voltage: 80V (max 120V for 23AWG)
- Insulation Resistance: >150 MOhm @ 100-500 V test voltage
- Capacitance: Nom 42pF/m
- Capacitance Unbalance to Earth: Max 160 pF/100m
- Velocity of propagation: 78-80%
- Skew: 25nsec/100m @100MHz
- Characteristic Impedance: 100 Ω +/- 3 Ohm @ 100MHz
- Transfer Impedance: 30mΩ/m@10MHz (ISO61156 grade 2)
- Propagation delay: 430nsec/100m @100MHz (NVP 78-80%)

ESCAB Order No.	Cable Type	Outer Diameter (mm)	Color	Packing Standard (per reel)	Origin Availability
E6A31-HP01	ESCAB CAT6A S/FTP HPS 500MHz 4x2x23AWG/1 PVC	7,70	Grey	500M	Asia/EU
E6A31-HP12	ESCAB CAT6A S/FTP HPS 500MHz 4x2x23AWG/1 LSHF	7,70	Grey	500M	Asia/EU
E6A31-HP13	ESCAB CAT6A S/FTP HPS 500MHz 4x2x23AWG/1 PE	7,80	Black	500M	Asia/EU

TRANSMISSION PERFORMANCE acc. to ANSI/TIA-568-C.2 Cat 6A (at 20 °C)									
Freq. (MHz)	NEXT (dB)	PS-NEXT (dB)	ACRF [ELFEXT] (dB)	PS-ACRF (dB)	PS-ANEXT (dB)	PS-AACRF (dB)	Return Loss (dB)	Insertion Lost (dB)	Propagation Delay (ns/100m)
	min.	min.	min.	min.	min.	min.	min.	min.	max.
1	74.3	72.3	67.8	64.8	67	67	20	2.1	570
4	65.3	63.3	55.8	52.8	67	66.2	23	3.8	552
8	60.8	58.8	49.7	46.7	67	60.1	24.5	5.3	547
10	59.3	57.3	47.8	44.8	67	58.2	25	5.9	545
16	56.2	54.2	43.7	40.7	67	54.1	25	7.5	543
20	54.8	52.8	41.8	38.8	67	52.2	25	8.4	542
25	53.3	51.3	39.8	36.8	67	50.2	24.3	9.4	541
31.25	51.9	49.9	37.9	34.9	67	48.3	23.6	10.5	540
62.5	47.4	45.4	31.9	28.9	65.6	42.3	21.5	15	539
100	44.3	42.3	27.8	24.8	62.5	38.2	20.1	19.1	538
200	39.8	37.8	21.8	18.8	58	32.2	18	27.6	537
250	38.3	36.3	19.8	16.8	56.5	30.2	17.3	31.1	536
300	37.1	35.1	18.3	15.3	55.3	28.7	16.8	34.3	536
400	35.3	33.3	15.8	12.8	53.5	26.2	15.9	40.1	536
500	33.8	31.8	13.8	10.8	52	24.2	15.2	45.3	536





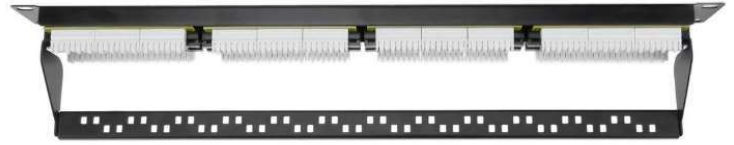
# PATCH PANEL CATEGORY 6

## UTP | FTP | SFTP



**Brief Description:**

With professional structure design, our Category 6 UTP patch panels are extremely durable for punching down strongly. With 110 and Krone dual type IDC design, accepts 110 and Krone type punch down tools, and 23-26AWG solid and stranded UTP cables. Writable & erasable marking surfaces for each port on the front panel for efficient system management.



**Features:**

- Meeting the ANSI/TIA-568-C.2 Category 6, ISO/IEC 11801 ED.2 and EN 50173-1 specifications.
- Supports T568 A&B wiring & easy installation.
- IDC Connector can accept 23-26 AWG solid and stranded cables.
- Interoperable and backward compatible to Category 5e, 5 or 3.
- Offers total solution of your Local Networking Area.
- All versions can be mounted on 19" EIA racks.

**Standards Compliance:**

- ANSI/TIA-568-C.2 Category 6
- ISO / IEC 11801 ED.2
- EN 50173-1
- Safety standard UL, IEC

**Approved:** UL Listed, ETL Verified

**Application:**

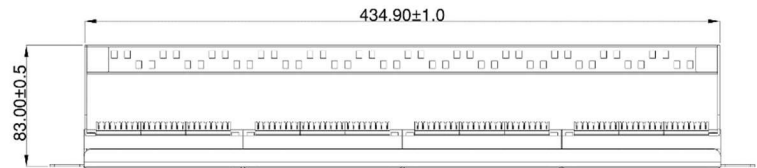
- 10BASE-T Ethernet
- 100BASE-TX Fast Ethernet
- 1000BASE-TX Fast Ethernet
- Analog voice and digital voice (VoIP)
- Analog (broadband, baseband) and Digital video.

**Electrical Specification:**

- |   |                           |
|---|---------------------------|
| • Dielectric Strength (contact to contact)    | 1000V RMS for 1 min @60Hz |
| • Dielectric Strength (conductive to surface) | 1500V RMS for 1 min @60Hz |
| • Insulation Resistance                       | 500 M.Ohm min             |
| • Contact Resistance                          | 2mOhm per contact         |

**Physical Specifications**

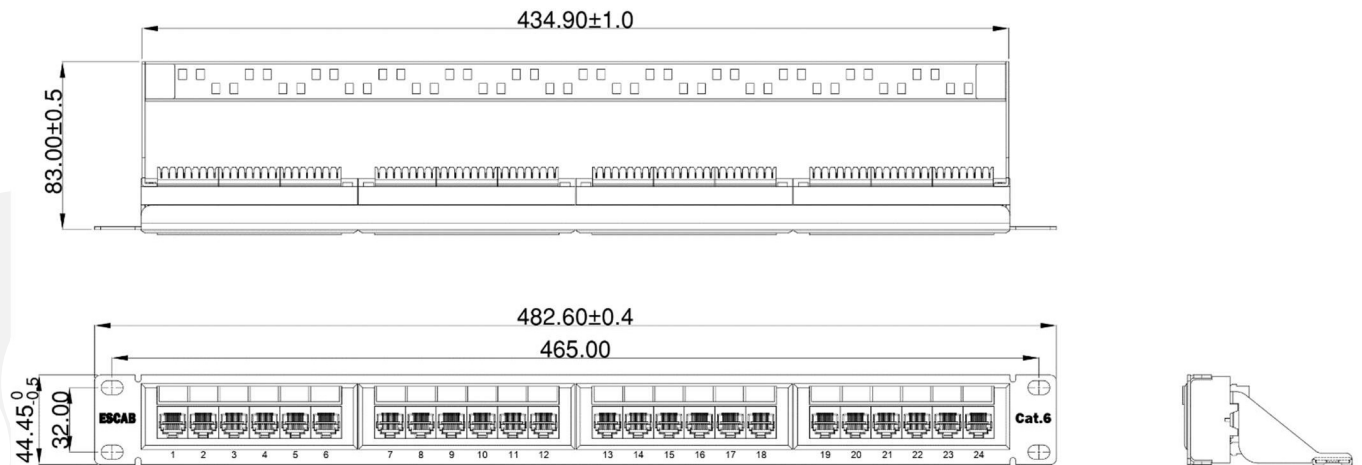
- IDC contact: 0.8mm thickness phosphor bronze, tin plating over nickel
- Jack operating life: minimum 1000 insertions with IEC 60603-7 compliant plug
- High impact plastic housing UL 94V-0
- Jack contact: phosphor bronze, 50micron thickness gold plated over nickel.
- IDC operating life: minimum 400 insertions
- PCB: FR-4 , 1.6mm thickness
- Temperature Range: -40°C to 70°C max
- Relative Humidity: 10% - 95%



### PATCH PANEL CATEGORY.6 UTP

□ Patch Panel Unshielded

ESCAB Order No.	Description	Unit	Wiring	Packing
Es-6UHT-6-24	Cat.6 180 Unshielded Patch Panel, 110 Type IDC,6/24 Ports	1U	T568A/B	1 unit/box
Es-6UHT-8-48	Cat.6 180 Unshielded Patch Panel, 110 Type IDC,8/48 Ports	2U	T568A/B	1 unit/box
Es-6UHT-8-96	Cat.6 180 Unshielded Patch Panel, 110 Type IDC,8/96 Ports	4U	T568A/B	1 unit/box
Es-6UHD-6-24	Cat.6 180 Unshielded Patch Panel, DUAL Type IDC,6/24 Ports	1U	T568A/B	1 unit/box
Es-6UHD-8-32	Cat.6 180 Unshielded Patch Panel, DUAL Type IDC,8/32 Ports	2U	T568A/B	1 unit/box

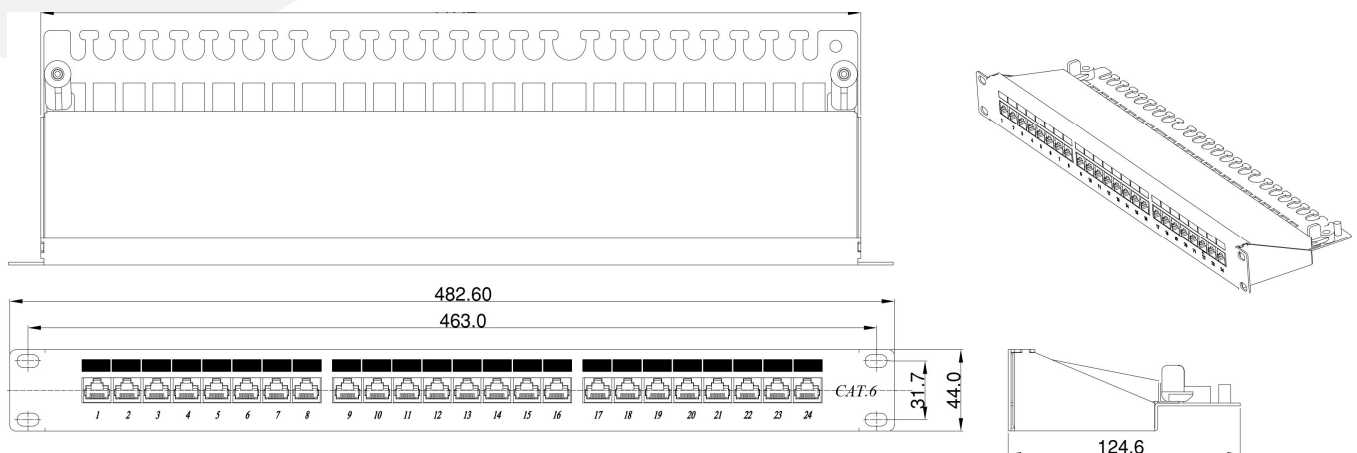


### PATCH PANEL CATEGORY.6 STP

□ Patch Panel Shielded

ESCAB Order No.	Description	Unit	Wiring	Packing
Es-6SHD-8-24	Cat.6 180 Shielded Patch Panel, Dual Type IDC,8/24 Ports	1U	T568A/B	1 unit/box
Es-6SHD-8-48	Cat.6 180 Shielded Patch Panel, Dual Type IDC,8/48 Ports	2U	T568A/B	1 unit/box

□ Shielded Patch Panel CAT.6 24port | P/N: ES-6SHD-8-24



# PATCH PANEL CATEGORY 6A

## UTP | STP



### Brief Description:

With professional structure design, our Category 6A UTP/STP patch panels are extremely durable for punching down strongly. With 110 and Krone dual type IDC design, accepts 110 and Krone type punch down tools, and 23-26AWG solid and stranded UTP cables. Writable & erasable marking surfaces for each port on the front panel for efficient system management.

### Features:

- Meeting the ANSI/TIA-568-C.2 Category 6A, ISO/IEC 11801 ED.2 and EN 50173-1 specifications.
- Supports T568 A&B wiring & easy installation.
- IDC Connector can accept 23-26 AWG solid and stranded cables.
- Offers total solution of your Local Networking Area.
- All versions can be mounted on 19" EIA racks.

### Standards Compliance:

- ANSI/TIA-568-C.2 Category 6A
- ISO / IEC 11801 ED.2
- EN 50173-1
- Safety standard UL, IEC

**Approved:** UL Listed, ETL Verified

### Application:

- 10BASE-T Ethernet
- 100BASE-TX Fast Ethernet
- 1000BASE-TX Fast Ethernet
- Analog voice and digital voice (VoIP)
- Analog (broadband, baseband) and Digital video.

### Electrical Specification:

- |   |                           |
|---|---------------------------|
| • Dielectric Strength (contact to contact)    | 1000V RMS for 1 min @60Hz |
| • Dielectric Strength (conductive to surface) | 1500V RMS for 1 min @60Hz |
| • Insulation Resistance                       | 500 M.Ohm min             |
| • Contact Resistance                          | 2mOhm per contact         |

### Physical Specifications

- IDC contact: 0.8mm thickness phosphor bronze with 0.5 micro-inch tin plating over nickel.
- Jack operating life: minimum 1000 insertions with IEC 60603-7 compliant plug.
- High impact plastic housing UL 94V-0
- Jack contact: phosphor bronze, 50micron thickness gold plated over nickel.
- IDC operating life: minimum 400 insertions
- PCB: FR-4 , 1.6mm thickness
- Temperature Range: -40°C to 70°C max
- Relative Humidity: 10% - 95%



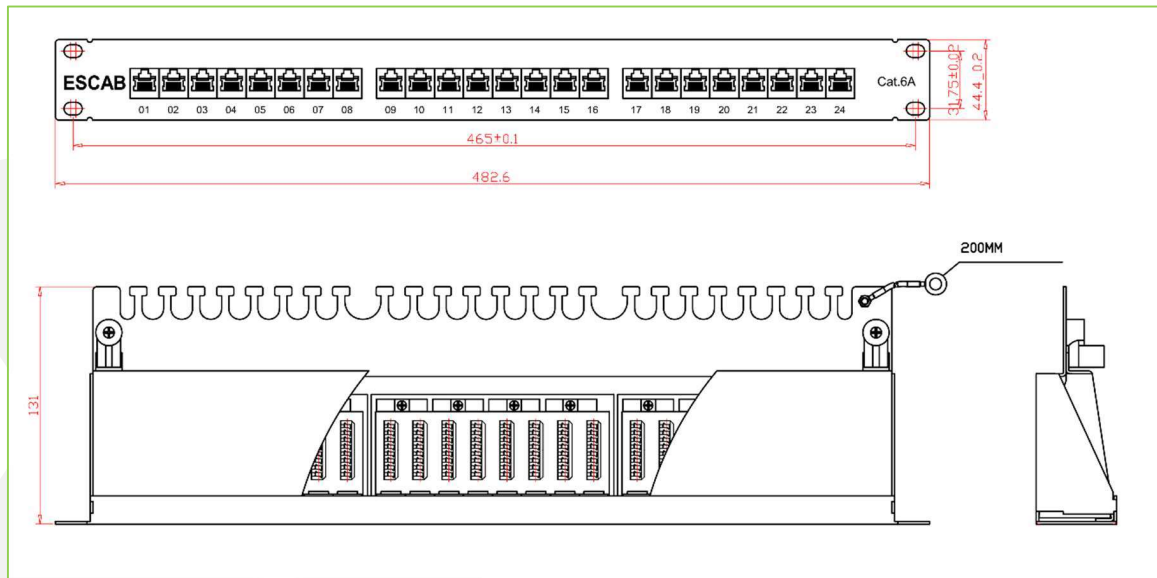
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**PATCH PANEL CATEGORY.6A STP & UTP**

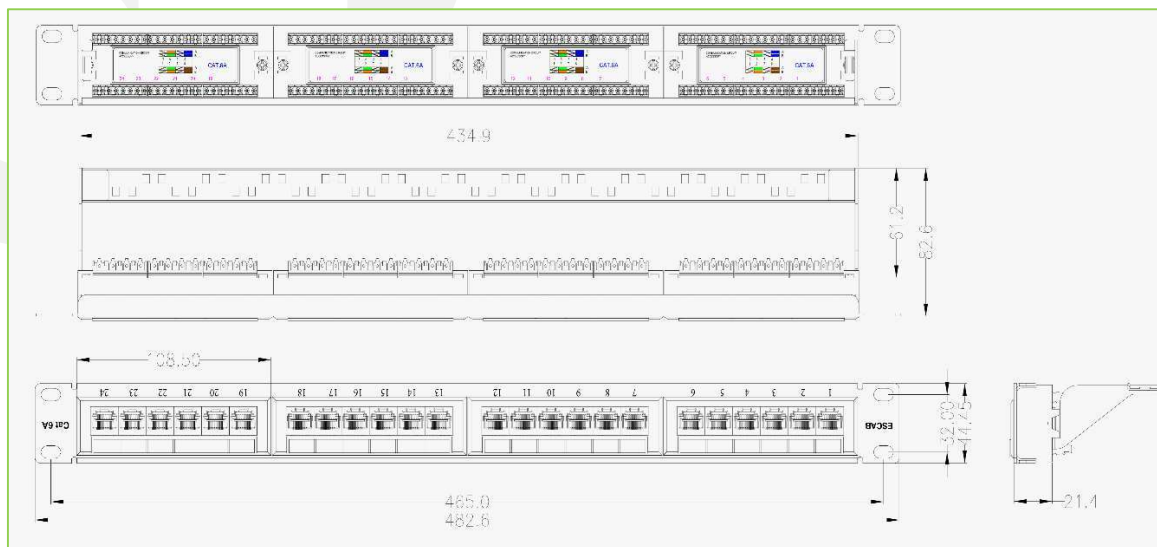
□ Patch Panel Shielded

ESCAB Order No.	Description	Unit	Wiring	Packing
Es-6AUHD-24	Cat.6A 180° Un-Shielded Patch Panel, 24 Ports	1U	T568A/B	1 unit/box
Es-6ASHD-24	Cat.6A 180° Shielded Patch Panel, 24 Ports	1U	T568A/B	1 unit/box
Es-6ASHD-48	Cat.6A 180° Shielded Patch Panel, 48 Ports	2U	T568A/B	1 unit/box

□ Shielded Patch Panel CAT.6A 24port | P/N: ES-6ASHD-24

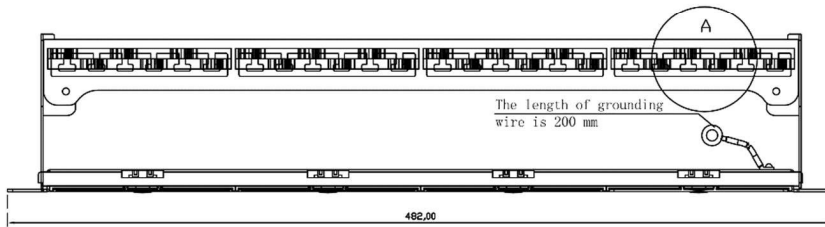
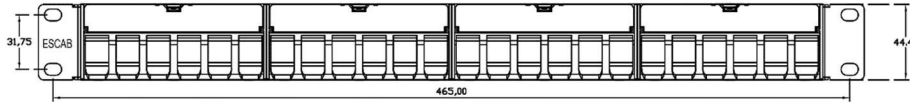


□ Un-Shielded Patch Panel CAT.6A 24port | P/N: ES-6AUHD-24



# 1U 24PORT PATCH PANEL UNLOAD

## UTP | SFTP



### Brief Description:

ESCAB Shielded Patch Panels protect critical data from EMI (electromagnetic interference) and RFI (radio frequency interference). This makes them ideal for use in health care, manufacturing, and other environments where EMI and RFI may be present. ESCAB Shielded Patch Panels are available in 24 and 48 ports and include a high-density option for applications where space is limited. Panels shall meet or exceed ANSI/ TIA-568-C, ANSI/TIA-1096-A, and IEC 60603-7. With professional structure design, our patch panels are suitable for UTP and STP RJ45 keystone jack modules. Writable & erasable marking surfaces for each port on the front panel for efficient system management.

### Features:

- Shielding provides EMI/RFI protection and data security.
- Panels feature a stainless-steel plate to provide grounding continuity between connectors and panel
- Standard-density panels include star washers and grounding lug for flexibility in panel grounding
- High-density panel includes hardware to accept standards compliant grounding connectors.
- All Standard-density panels include cable management bar
- Mounted on 19" EIA racks.

### Standards Compliance:

- ANSI/TIA-568-0-E
- ANSI/TIA-1096-A
- IEC 60603-7
- RoHS complaint

### Application:

- 10BASE-T Ethernet
- 100BASE-TX Fast Ethernet
- 1000BASE-TX Fast Ethernet
- Analog voice and digital voice (VoIP)
- Analog (broadband, baseband) and Digital video.

### Operation environment:

- Temperature Range -40°C to 75°C max
- Humidity 10% - 65%

ESCAB Order No.	Description	Type	Unit	Jack RJ45 (recommend only)	Packing
ES-HSW-24	Shielded Patch Panel CAT.6 or CAT.6A, 24 ports, 1RU with cable management bar	Cat6 STP	1U	EJ-C6-S180	1 unit/box
		Cat.6A STP	1U	EJ-C6A-S180HP EJ-C6A-S180	1 unit/box
ES-UW-24	Un-Shielded Patch Panel CAT.6A, 24 ports, 1RU with cable management bar	Cat.6A UTP	1U	EJ-C6A-U90	1 unit/box



□ Shielded Patch Panel CAT.6 or CAT.6A, 24 ports, 1RU with cable management bar

P/N : ES-HSW-24



□ Un-Shielded Patch Panel CAT.6 or CAT.6A, 24 ports, 1RU with cable management bar

P/N : ES-UW-24



□ Recommendation:



EJ-C6A-S180HP  
EJ-C6-S180HP



EJ-C6A-S180  
EJ-C6-S180



EJ-C6A-U90-T2  
EJ-C6-U90-T2

# CATEGORY-5e UTP Patch Cord - PVC

**Features:**

- ANSI/TIA/EIA 568-B.2-1
- CENELEC EN 50173-1
- CENELEC EN 50288
- ISO/IEC11801 CLASS D+, 2nd Edition
- Flame retardant according to IEC 60332-1-2

(\* We Implemented RoHS Compliance for the Requirement of European Union Issued Directive 2002/95/EC.



**Application:**

- 10BASE-T, 100BASE-Tx, 1000BASE-Tx Ethernet
- 100 VG Any LAN(IEEE 802.12) 155/622 Mbps ATM )
- Guaranteed performance to 125MHz
- Voice, T1, ISDN
- The patch cable for use in workplaces (tertiary areas) is suitable for connecting various terminal devices as a part of structured cabling.

**Cables Characteristics & Performance:**

- Connector RJ45 Unshielded Connector with 50u inch Gold plated
- Housing PVC Molded with Strain Relief Option: Snag Proof
- Conductor Bare copper 24AWG
- Operating voltage 80V (max 125V)
- Plug Insertion Life min1000 times
- Current rating 1.5A @20°C
- Flammability rating UL94V-V0
- Temperature range -40°C to +70°C max
- Relative Humidity up to 95% max

**Reference Certified:**

- EC/ETL/DELTA Certified ANSI/TIA/EIA-568-B.2-1 Category 5e Testing Performance Requirements.
- UL/cUL Listed.

**Typical Performance:**

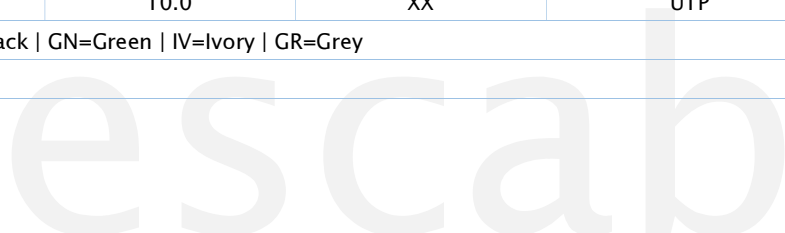
NEXT	MHz	1	4	8	10	16	20	31.25	62.5	100
	dB	60	53.5	48.6	47.0	43.6	40.3	38.7	33.6	30.1

**Order Information:**

Ref P/N	Outer Sheath	Length	Color	Type
ESPC-5UA-005MB-XX	PVC (UL-CM)	0.5	XX	UTP
ESPC-5UA-010MB-XX	PVC (UL-CM)	1.0	XX	UTP
ESPC-5UA-020MB-XX	PVC (UL-CM)	2.0	XX	UTP
ESPC-5UA-030MB-XX	PVC (UL-CM)	3.0	XX	UTP
ESPC-5UA-050MB-XX	PVC (UL-CM)	5.0	XX	UTP
ESPC-5UA-100MB-XX	PVC (UL-CM)	10.0	XX	UTP

XX : Color BL=Blue | RD=Red | YL=Yellow | BK=Black | GN=Green | IV=Ivory | GR=Grey

B : Wiring Scheme : T568B-T568B





# CATEGORY-5e UTP Patch Cord - LSHF

**Features:**

- ANSI/TIA/EIA 568-B.2-1
- CENELEC EN 50173-1
- CENELEC EN 50288
- ISO/IEC11801 CLASS D+, 2nd Edition
- Flame retardant according to IEC 60332-1-2

(\* We Implemented RoHS Compliance for the Requirement of European Union Issued Directive 2002/95/EC.



**Application:**

- 10BASE-T, 100BASE-Tx, 1000BASE-Tx Ethernet
- 100 VG Any LAN(IEEE 802.12) 155/622 Mbps ATM )
- Guaranteed performance to 125MHz
- Voice, T1, ISDN
- The patch cable for use in workplaces (tertiary areas) is suitable for connecting various terminal devices as a part of structured cabling.

**Cables Characteristics & Performance:**

- Connector RJ45 Unshielded Connector with 50u inch Gold plated
- Housing PVC Molded with Strain Relief Option: Snag Proof
- Conductor Bare copper 24AWG
- Operating voltage 80V (max 125V)
- Plug Insertion Life min1000 times
- Current rating 1.5A @20°C
- Flammability rating UL94V-V0
- Temperature range -40°C to +70°C max
- Relative Humidity up to 95% max

**Reference Certified:**

- EC/ETL/DELTA Certified ANSI/TIA/EIA-568-B.2-1 Category 5e Testing Performance Requirements.
- UL/cUL Listed.

**Typical Performance:**

NEXT	MHz	1	4	8	10	16	20	31.25	62.5	100
	dB	60	53.5	48.6	47.0	43.6	40.3	38.7	33.6	30.1

**Order Information:**

Ref P/N	Outer Sheath	Length	Color	Type
ESPC-5UC-005MB-XX	LSHF (UL-CMP)	0.5	XX	UTP
ESPC-5UC-010MB-XX	LSHF (UL-CMP)	1.0	XX	UTP
ESPC-5UC-020MB-XX	LSHF (UL-CMP)	2.0	XX	UTP
ESPC-5UC-030MB-XX	LSHF (UL-CMP)	3.0	XX	UTP
ESPC-5UC-050MB-XX	LSHF (UL-CMP)	5.0	XX	UTP
ESPC-5UC-100MB-XX	LSHF (UL-CMP)	10.0	XX	UTP

XX : Color BL=Blue | RD=Red | YL=Yellow | BK=Black | GN=Green | IV=Ivory | GR=Grey

B : Wiring Scheme : T568B-T568B



# CATEGORY-6 UTP Patch Cord - PVC

**Features:**

- ANSI/TIA/EIA 568-B.2-1
- CENELEC EN 50173-1
- CENELEC EN 50288
- ISO/IEC11801 CLASS E, 2nd Edition
- IEEE 802.3bt Type 4
- Flame retardant according to IEC 60332-1-2

(\* We Implemented RoHS Compliance for the Requirement of European Union Issued Directive 2002/95/EC.



**Application:**

- 10BASE-T, 100BASE-Tx, 1000BASE-Tx Ethernet
- 100 VG Any LAN (IEEE 802.12) 155/622 Mbps ATM )
- Guaranteed performance to 300MHz
- Voice, T1, ISDN
- The patch cable for use in workplaces (tertiary areas) is suitable for connecting various terminal devices as a part of structured cabling.

**Cables Characteristics & Performance:**

- Connector RJ45 Unshielded Connector with 50u inch Gold plated
- Housing PVC Molded with Strain Relief Option: Snag Proof
- Conductor Bare copper 24AWG
- Operating voltage 80V (max 125V)
- Plug Insertion Life min1000 times
- Current rating 1.5A @20°C
- Flammability rating UL94V-V0
- Temperature range -40°C to +70°C max
- Relative Humidity up to 95% max

**Reference Certified:**

- EC/ETL/DELTA Certified ANSI/TIA/EIA-568-B.2-1 Category 5e Testing Performance Requirements.
- UL/cUL Listed

**Typical Performance:**

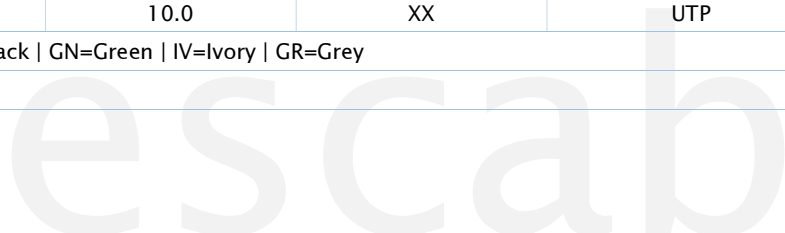
NEXT	MHz	1	4	8	10	16	20	31.25	62.5	100	200	250
	dB	65	63	58.2	56.6	53.2	51.6	48.4	43.4	39.9	34.8	33.1

**Order Information:**

Ref P/N	Outer Sheath	Length	Color	Type
ESPC-6UA-005MB-XX	PVC (UL-CM)	0.5	XX	UTP
ESPC-6UA-010MB-XX	PVC (UL-CM)	1.0	XX	UTP
ESPC-6UA-020MB-XX	PVC (UL-CM)	2.0	XX	UTP
ESPC-6UA-030MB-XX	PVC (UL-CM)	3.0	XX	UTP
ESPC-6UA-050MB-XX	PVC (UL-CM)	5.0	XX	UTP
ESPC-6UA-100MB-XX	PVC (UL-CM)	10.0	XX	UTP

XX : Color BL=Blue | RD=Red | YL=Yellow | BK=Black | GN=Green | IV=Ivory | GR=Grey

B : Wiring Scheme : T568B-T568B



# CATEGORY-6 UTP Patch Cord - LSHF

**Features:**

- ANSI/TIA/EIA 568-C.2-1
- CENELEC EN 50173-1
- CENELEC EN 50288
- ISO/IEC11801 CLASS E, 2nd Edition
- IEEE 802.3bt Type 4
- Flame retardant according to IEC 60332-1-2

(\*) We Implemented RoHS Compliance for the Requirement of European Union Issued Directive 2002/95/EC.



**Application:**

- 10BASE-T, 100BASE-Tx, 1000BASE-Tx Ethernet
- 100 VG Any LAN (IEEE 802.12) 155/622 Mbps ATM )
- Guaranteed performance to 300MHz
- Voice, T1, ISDN
- The patch cable for use in workplaces (tertiary areas) is suitable for connecting various terminal devices as a part of structured cabling.

**Cables Characteristics & Performance:**

- Connector RJ45 Unshielded Connector with 50u inch Gold plated
- Housing PVC Molded with Strain Relief Option: Snag Proof
- Conductor Bare copper 24AWG
- Operating voltage 80V (max 125V)
- Plug Insertion Life min1000 times
- Current rating 1.5A @20°C
- Flammability rating UL94V-V0
- Temperature range -40°C to +70°C max
- Relative Humidity up to 95% max

**Reference Certified:**

- EC/ETL/DELTA Certified ANSI/TIA/EIA-568-C.2-1 Category 6 Testing Performance Requirements by manufacture.
- UL/cUL Listed

**Typical Performance:**

NEXT	MHz	1	4	8	10	16	20	31.25	62.5	100	200	250
	dB		65	63	58.2	56.6	53.2	51.6	48.4	43.4	39.9	34.8

**Order Information:**

Ref P/N	Outer Sheath	Length	Color	Type
ESPC-6UC-005MB-XX	LSHF (UL-CMP)	0.5	XX	UTP
ESPC-6UC-010MB-XX	LSHF (UL-CMP)	1.0	XX	UTP
ESPC-6UC-020MB-XX	LSHF (UL-CMP)	2.0	XX	UTP
ESPC-6UC-030MB-XX	LSHF (UL-CMP)	3.0	XX	UTP
ESPC-6UC-050MB-XX	LSHF (UL-CMP)	5.0	XX	UTP
ESPC-6UC-100MB-XX	LSHF (UL-CMP)	10.0	XX	UTP

XX : Color BL=Blue | RD=Red | YL=Yellow | BK=Black | GN=Green | IV=Ivory | GR=Grey

B : Wiring Scheme : T568B-T568B

# Patch Cord CATEGORY-6 F/UTP - PVC

Category 6 F/UTP system patch cord is factory verified products, dedicated for datacenter and high end project use. To realize the high performance, the cable is coming with overall screen aluminum shielding layers.

**Features:**

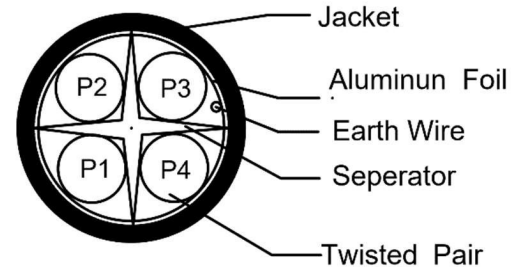
- ANSI/TIA/EIA 568-C.2-1
- CENELEC EN 50173-1
- CENELEC EN 50288
- ISO/IEC11801 CLASS E, 2nd Edition
- IEEE 802.3bt Type 4
- Flame retardant according to IEC 60332-1-2
- Safety standard UL , IEC

(\*) We Implemented RoHS Compliance for the Requirement of European Union Issued Directive 2002/95/EC.



**Application:**

- Patch panel to patch panel connections
- PC to information outlet connections
- Information outlet to telecommunications closet connections
- Equipment & DTE connections
- Voice; T1; ISDN
- 10BASE-T (IEEE 802.3)
- 16Mbps Token Ring (IEEE802.5)
- 100VG-AnyLAN (IEEE802.12)
- 100BASE-T Ethernet (IEEE802.3)
- 155/622Mbps 1.2/2.4 Gbps ATM
- 1000Mbps Gigabit Ethernet
- 300MHz Broadband Video



**Cable performance & specification**

- Connector RJ45 Shielded Connector with 50u inch Gold plated over nickel
- Housing PVC Molded with Strain Relief | Housing > Polycarbonate Option: Snag Proof
- Conductor Bare copper 23AWG
- Insulation Foamed-skin PE 0.2mm | Insulation resistance 1500Mohm/100m min.
- Overall screen Aluminum-foil laminated tape 100% coverage
- Jacket PVC ; Outer diameter 5.9mm +/- 0.2mm
- Operating voltage 80V (max. 125V)
- Plug Insertion Life min 1000 times
- Temperature range -40°C to +70°C max
- Relative Humidity up to 95% max
- Resistance unbalance 3% max/100m
- Capacitance Unbalance Pair to Ground perform to 330pF/100m max

**Reference Certified:**

- EC/ETL/DELTA Certified ANSI/TIA/EIA-568-C.2-1 Category 6 Testing Performance Requirements by manufacture.
- UL/cUL Listed



# Patch Cord CATEGORY-6 F/UTP - PVC

## Typical Performance:

NEXT	MHz	1	4	8	10	16	20	31.25	62.5	100	200	250
	dB	65	63	58.2	56.6	53.2	51.6	48.4	43.4	39.9	34.8	33.1

## Order Information:

Ref P/N	Outer Sheath	Length	Color	Type
ESPC-6FA-005MB-XX	PVC (UL-CM)	0.5	XX	UTP
ESPC-6FA-010MB-XX	PVC (UL-CM)	1.0	XX	UTP
ESPC-6FA-020MB-XX	PVC (UL-CM)	2.0	XX	UTP
ESPC-6FA-030MB-XX	PVC (UL-CM)	3.0	XX	UTP
ESPC-6FA-050MB-XX	PVC (UL-CM)	5.0	XX	UTP
ESPC-6FA-100MB-XX	PVC (UL-CM)	10.0	XX	UTP

XX : Color BL=Blue | RD=Red | YL=Yellow | BK=Black | GN=Green | IV=Ivory | GR=Grey

B : Wiring Scheme : T568B-T568B



# Patch Cord CATEGORY-6 F/UTP - LSHF

Category 6 F/UTP system patch cord is factory verified products, dedicated for datacenter and high end project use.

To realize the high performance, the cable is coming with overall screen aluminum shielding layers.

**Features:**

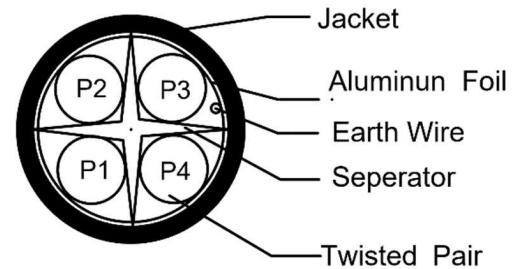
- ANSI/TIA/EIA 568-B.2-1
- CENELEC EN 50173-1
- CENELEC EN 50288
- ISO/IEC11801 CLASS E, 2nd Edition
- IEEE 802.3bt Type 4
- Flame retardant according to IEC 60332-1-2
- Safety standard UL , IEC

(\*) We Implemented RoHS Compliance for the Requirement of European Union Issued Directive 2002/95/EC.



**Application:**

- Patch panel to patch panel connections
- PC to information outlet connections
- Information outlet to telecommunications closet connections
- Equipment & DTE connections
- Voice; T1; ISDN
- 10BASE-T (IEEE 802.3)
- 16Mbps Token Ring (IEEE802.5)
- 100VG-AnyLAN (IEEE802.12)
- 100BASE-T Ethernet (IEEE802.3)
- 155/622Mbps 1.2/2.4 Gbps ATM
- 1000Mbps Gigabit Ethernet
- 300MHz Broadband Video



**Cable performance & specification**

- Connector RJ45 Shielded Connector with 50u inch Gold plated over nickel
- Housing PVC Molded with Strain Relief | Housing > Polycarbonate Option: Snag Proof
- Conductor Bare copper 23AWG
- Insulation Foamed-skin PE 0.2mm | Insulation resistance 1500Mohm/100m min.
- Overall screen Aluminum-foil laminated tape 100% coverage
- Jacket LSHF ; Outer diameter 5.9mm +/- 0.2mm
- Operating voltage 80V (max. 125V)
- Plug Insertion Life min 1000 times
- Temperature range -40°C to +70°C max
- Relative Humidity up to 95% max
- Resistance unbalance 3% max/100m
- Capacitance Unbalance Pair to Ground perform to 330pF/100m max

**Reference Certified:**

- 3P Certified ANSI/TIA/EIA-568-B.2-1 Category 6 Testing Performance Requirements by manufacture.
- UL/cUL Listed



# Patch Cord CATEGORY-6 F/UTP - LSHF

## Typical Performance:

NEXT	MHz	1	4	8	10	16	20	31.25	62.5	100	200	250
	dB	65	63	58.2	56.6	53.2	51.6	48.4	43.4	39.9	34.8	33.1

## Order Information:

Ref P/N	Outer Sheath	Length	Color	Type
ESPC-6FC-005MB-XX	LSHF (UL-CMP)	0.5	XX	UTP
ESPC-6FC-010MB-XX	LSHF (UL-CMP)	1.0	XX	UTP
ESPC-6FC-020MB-XX	LSHF (UL-CMP)	2.0	XX	UTP
ESPC-6FC-030MB-XX	LSHF (UL-CMP)	3.0	XX	UTP
ESPC-6FC-050MB-XX	LSHF (UL-CMP)	5.0	XX	UTP
ESPC-6FC-100MB-XX	LSHF (UL-CMP)	10.0	XX	UTP
XX : Color BL=Blue   RD=Red   YL=Yellow   BK=Black   GN=Green   IV=Ivory   GR=Grey				
B : Wiring Scheme : T568B-T568B				





## Patch Cord CATEGORY-6 SFTP - PVC

Category 6 S/FTP system patch cord is factory verified products, dedicated for datacenter and high end project use. To realize the high performance, the cable is coming with two shielding layers. Each pair is wrapped by individual Aluminum-Mylar film, to eliminate the near end pair to pair interferences. Again an aluminum coated braiding laid over the inner structure, provides protection against outside EMI interferences.

### Features:

- ANSI/TIA/EIA 568-B.2-1
- CENELEC EN 50173-1
- CENELEC EN 50288
- ISO/IEC11801 CLASS E, 2nd Edition
- Flame retardant according to IEC 60332-1-2
- Safety standard UL, IEC

(\*) We Implemented RoHS Compliance for the Requirement of European Union Issued Directive 2002/95/EC.

### Application:

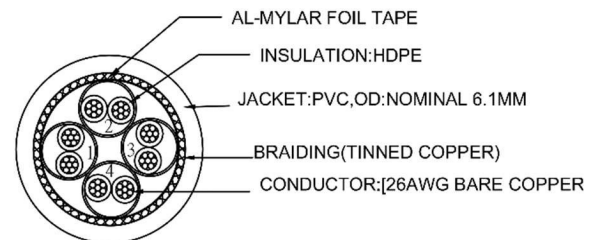
- Patch panel to patch panel connections
- PC to information outlet connections
- Information outlet to telecommunications closet connections
- Equipment & DTE connections
- Voice; T1; ISDN
- 10BASE-T (IEEE 802.3)
- 16Mbps Token Ring (IEEE802.5)
- 100VG-AnyLAN (IEEE802.12)
- 100BASE-T Ethernet (IEEE802.3)
- 155/622Mbps 1.2/2.4 Gbps ATM
- 1000Mbps Gigabit Ethernet
- 350MHz Broadband Video

### Cable performance & specification

- Connector RJ45 Shielded Connector with 50u inch Gold plated over nickel
- Housing PVC Molded with Strain Relief | Housing > Polycarbonate Option: Snag Proof
- Conductor Bare copper 23AWG
- Insulation Foamed-skin PE 0.2mm | Insulation resistance 1500Mohm/100m min.
- Individual foil Aluminum-foil laminated tape will be wrapped over each pairs.
- Overall shield Tinned copper wire braiding
- Jacket PVC ; Outer diameter 6.1mm +/- 0.2mm
- Resistance unbalance 3% max/100m
- Capacitance Unbalance Pair to Ground perform to 330pF/100m max
- Plug Insertion Life, minimum 1000 times
- Temperature range -40°C to +70°C max
- Relative Humidity 10% - 95% max
- 

### Reference Certified:

- 3P Certified ANSI/TIA/EIA-568-B.2-1 Category 6 Testing Performance Requirements by manufacture.
- UL/cUL Listed



# Patch Cord CATEGORY-6 SFTP - PVC

## Typical Performance:

NEXT	MHz	1	4	8	10	16	20	31.25	62.5	100	200	250
	dB	65	63	58.2	56.6	53.2	51.6	48.4	43.4	39.9	34.8	33.1

## Order Information:

Ref P/N	Outer Sheath	Length	Color	Type
ESPC-6SA-005MB-XX	PVC (UL-CM)	0.5	XX	UTP
ESPC-6SA-010MB-XX	PVC (UL-CM)	1.0	XX	UTP
ESPC-6SA-020MB-XX	PVC (UL-CM)	2.0	XX	UTP
ESPC-6SA-030MB-XX	PVC (UL-CM)	3.0	XX	UTP
ESPC-6SA-050MB-XX	PVC (UL-CM)	5.0	XX	UTP
ESPC-6SA-100MB-XX	PVC (UL-CM)	10.0	XX	UTP

XX : Color BL=Blue | RD=Red | YL=Yellow | BK=Black | GN=Green | IV=Ivory | GR=Grey

B : Wiring Scheme : T568B-T568B



## Patch Cord CATEGORY-6 SFTP - LSHF

Category 6 S/FTP system patch cord is factory verified products, dedicated for datacenter and high end project use. To realize the high performance, the cable is coming with two shielding layers. Each pair is wrapped by individual Aluminum-Mylar film, to eliminate the near end pair to pair interferences. Again an aluminum coated braiding laid over the inner structure, provides protection against outside EMI interferences.

### Features:

- ANSI/TIA/EIA 568-B.2-1
- CENELEC EN 50173-1
- CENELEC EN 50288
- ISO/IEC11801 CLASS E, 2nd Edition
- Flame retardant according to IEC 60332-1-2
- Safety standard UL, IEC

(\*) We Implemented RoHS Compliance for the Requirement of European Union Issued Directive 2002/95/EC.

### Application:

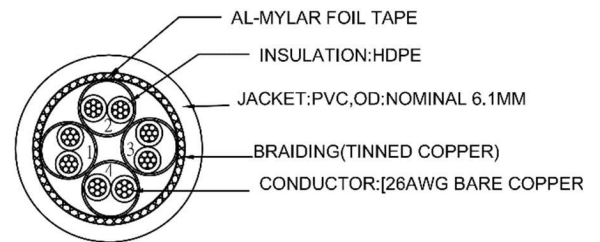
- Patch panel to patch panel connections
- PC to information outlet connections
- Information outlet to telecommunications closet connections
- Equipment & DTE connections
- Voice; T1; ISDN
- 10BASE-T (IEEE 802.3)
- 16Mbps Token Ring (IEEE802.5)
- 100VG-AnyLAN (IEEE802.12)
- 100BASE-T Ethernet (IEEE802.3)
- 155/622Mbps 1.2/2.4 Gbps ATM
- 1000Mbps Gigabit Ethernet
- 350MHz Broadband Video

### Cable performance & specification

- Connector RJ45 Shielded Connector with 50u inch Gold plated over nickel
- Housing PVC Molded with Strain Relief | Housing > Polycarbonate Option: Snag Proof
- Conductor Bare copper 23AWG
- Insulation Foamed-skin PE 0.2mm | Insulation resistance 1500Mohm/100m min.
- Individual foil Aluminum-foil laminated tape will be wrapped over each pairs.
- Overall shield Tinned copper wire braiding
- Jacket LSHF ; Outer diameter 6.1mm +/- 0.2mm
- Resistance unbalance 3% max/100m
- Capacitance Unbalance Pair to Ground perform to 330pF/100m max
- Plug Insertion Life, minimum 1000 times
- Temperature range -40°C to +70°C max
- Relative Humidity 10% - 95% max
- 

### Reference Certified:

- 3P Certified ANSI/TIA/EIA-568-B.2-1 Category 6 Testing Performance Requirements by manufacture.
- UL/cUL Listed



## Patch Cord CATEGORY-6 SFTP - LSHF

### Typical Performance:

NEXT	MHz	1	4	8	10	16	20	31.25	62.5	100	200	250
	dB	65	63	58.2	56.6	53.2	51.6	48.4	43.4	39.9	34.8	33.1

### Order Information:

Ref P/N	Outer Sheath	Length	Color	Type
ESPC-6SC-005MB-XX	LSHF (UL-CMP)	0.5	XX	UTP
ESPC-6SC-010MB-XX	LSHF (UL-CMP)	1.0	XX	UTP
ESPC-6SC-020MB-XX	LSHF (UL-CMP)	2.0	XX	UTP
ESPC-6SC-030MB-XX	LSHF (UL-CMP)	3.0	XX	UTP
ESPC-6SC-050MB-XX	LSHF (UL-CMP)	5.0	XX	UTP
ESPC-6SC-100MB-XX	LSHF (UL-CMP)	10.0	XX	UTP
XX : Color BL=Blue   RD=Red   YL=Yellow   BK=Black   GN=Green   IV=Ivory   GR=Grey				
B : Wiring Scheme : T568B-T568B				

## Patch Cord CATEGORY-6A F/UTP - LSHF

Category 6A F/UTP system patch cord is factory verified products, dedicated for datacenter and high end project use.

To realize the high performance, the cable is coming with overall screen aluminum shielding layers.

### Features:

- ANSI/TIA-568.2-D (Cat 6A)
- ISO/IEC 11801-1 (Cat 6A)
- EN 50173-1 (Cat 6A)
- ANSI/TIA-1096-A (formerly FCC Part 68)
- IEEE 802.3bt PoE Type 1 (15.4 watts) formerly 802.3af, Type 2 (30 watts) formerly 802.3at, Type 3 (60 watts), and Type 4 (90 watts)
- Cisco UPoE (60 watts), UPoE+ (90 watts)
- Power over HDBaseT PoH (95 watts)
- Maximum cable bundle for 90 watt PoE and above is 17 cords, per ISO IEC TS 29125
- Fire Safety rating to IEC 60332-1-2
- Acid Gas Emissions to IEC 60754-2
- Smoke Index to IEC 61034.

### Application:

- Patch panel to patch panel connections
- PC to information outlet connections
- Information outlet to telecommunications closet connections
- Equipment & DTE connections
- Voice; T1; ISDN
- 10BASE-T (IEEE 802.3)
- 16Mbps Token Ring (IEEE802.5)
- 100VG-AnyLAN (IEEE802.12)
- 100BASE-T Ethernet (IEEE802.3)
- 155/622Mbps 1.2/2.4 Gbps ATM
- 1000Mbps Gigabit Ethernet
- 550MHz Broadband Video

### Cable performance & specification

- Connector RJ45 Shielded Connector with 50u inch Gold plated over nickel
- Housing PVC Molded with Strain Relief | Housing > Polycarbonate Option: Snag Proof
- Conductor Bare copper 26AWG
- Insulation Foamed-skin PE 0.2mm | Insulation resistance 1500Mohm/100m min.
- Overall screen Aluminum-foil laminated tape 100% coverage
- Jacket LSHF ; Outer diameter 6.0mm +/- 0.2mm
- Operating voltage 80V (max. 125V)
- Plug Insertion Life min 1000 times
- Temperature range -40°C to +70°C max
- Relative Humidity up to 95% max
- Resistance unbalance 3% max/100m
- Capacitance Unbalance Pair to Ground perform to 330pF/100m max

### Reference Certified:

- 3P Certified ANSI/TIA-568.2-D Category 6A Testing Performance Requirements by manufacture.
- UL/cUL Listed



escab

# Patch Cord CATEGORY-6A F/UTP - LSHF

**Order Information:**

Ref P/N	Outer Sheath	Length	Color	Type
EPC6A-FUC-005MB-XX	LSHF (UL-CMP)	0.5	XX	UTP
EPC6A-FUC-010MB-XX	LSHF (UL-CMP)	1.0	XX	UTP
EPC6A-FUC-020MB-XX	LSHF (UL-CMP)	2.0	XX	UTP
EPC6A-FUC-030MB-XX	LSHF (UL-CMP)	3.0	XX	UTP
EPC6A-FUC-050MB-XX	LSHF (UL-CMP)	5.0	XX	UTP
EPC6A-FUC-100MB-XX	LSHF (UL-CMP)	10.0	XX	UTP

XX : Color BL=Blue | RD=Red | YL=Yellow | BK=Black | GN=Green | IV=Ivory | GR=Grey

B : Wiring Scheme : T568B-T568B



escab

## Patch Cord CATEGORY-6A F/UTP - LSHF

Category 6A U/FTP system patch cord is factory verified products, dedicated for datacenter and high end project use.

To realize the high performance, the cable is coming with overall screen aluminum shielding layers.

### Features:

- ANSI/TIA-568.2-D (Cat 6A)
- ISO/IEC 11801-1 (Cat 6A)
- EN 50173-1 (Cat 6A)
- ANSI/TIA-1096-A (formerly FCC Part 68)
- IEEE 802.3bt PoE Type 1 (15.4 watts) formerly 802.3af, Type 2 (30 watts) formerly 802.3at, Type 3 (60 watts), and Type 4 (90 watts)
- Cisco UPoE (60 watts), UPoE+ (90 watts)
- Power over HDBaseT PoH (95 watts)
- Maximum cable bundle for 90 watt PoE and above is 17 cords, per ISO IEC TS 29125
- Fire Safety rating to IEC 60332-1-2
- Acid Gas Emissions to IEC 60754-2
- Smoke Index to IEC 61034.

### Application:

- Patch panel to patch panel connections
- PC to information outlet connections
- Information outlet to telecommunications closet connections
- Equipment & DTE connections
- Voice; T1; ISDN
- 10BASE-T (IEEE 802.3)
- 16Mbps Token Ring (IEEE802.5)
- 100VG-AnyLAN (IEEE802.12)
- 100BASE-T Ethernet (IEEE802.3)
- 155/622Mbps 1.2/2.4 Gbps ATM
- 1000Mbps Gigabit Ethernet
- 550MHz Broadband Video

### Cable performance & specification

- Connector RJ45 Shielded Connector with 50u inch Gold plated over nickel
- Housing PVC Molded with Strain Relief | Housing > Polycarbonate Option: Snag Proof
- Conductor Bare copper 26AWG
- Insulation Foamed-skin PE 0.2mm | Insulation resistance 1500Mohm/100m min.
- Overall screen Aluminum-foil laminated tape 100% coverage
- Jacket LSHF ; Outer diameter 6.0mm +/- 0.2mm
- Operating voltage 80V (max. 125V)
- Plug Insertion Life min 1000 times
- Temperature range -40°C to +70°C max
- Relative Humidity up to 95% max
- Resistance unbalance 3% max/100m
- Capacitance Unbalance Pair to Ground perform to 330pF/100m max

### Reference Certified:

- 3P Certified ANSI/TIA-568.2-D Category 6A Testing Performance Requirements by manufacture.
- UL/cUL Listed



escab



# Patch Cord CATEGORY-6A U/FTP - LSHF

## Order Information:

Ref P/N	Outer Sheath	Length	Color	Type
EPC6A-UFC-005MB-XX	LSHF (UL-CMP)	0.5	XX	UTP
EPC6A-UFC-010MB-XX	LSHF (UL-CMP)	1.0	XX	UTP
EPC6A-UFC-020MB-XX	LSHF (UL-CMP)	2.0	XX	UTP
EPC6A-UFC-030MB-XX	LSHF (UL-CMP)	3.0	XX	UTP
EPC6A-UFC-050MB-XX	LSHF (UL-CMP)	5.0	XX	UTP
EPC6A-UFC-100MB-XX	LSHF (UL-CMP)	10.0	XX	UTP
XX : Color BL=Blue   RD=Red   YL=Yellow   BK=Black   GN=Green   IV=Ivory   GR=Grey				
B : Wiring Scheme : T568B-T568B				



escab

# KEYSTONE JACK CAT5E

## UTP



**Features:**

- Performance conforms to ANSI/TIA-568-C.2, ISO/IEC 11801 and EN50173-1 Category 5e specification -1
- Support T568 A&B wiring & easy installation.
- Offers total solution of your local area networking.
- IDC type connector can accept 22-24 AWG solid and stranded cables.
- Terminate using 110 or krone tools.
- RoHS compliant



**Applications:**

- 10Base-T/100Base-TX/100Base-T4/1000Base-T CENELEC EN 50173-1
- ATM-25/ATM-51/ATM-155/100VG-AnyLan
- TR-4/TR-16 Active/TR16 Passive

**Typical Specifications:**

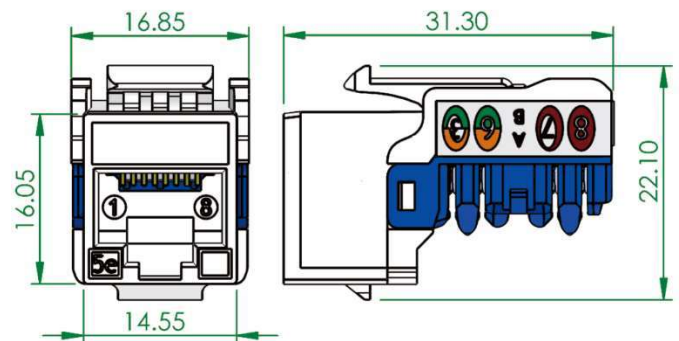
- Category 5e UTP keystone jacks are PC plastic package, suitable for different application environments, bandwidth of 125MHz / 250MHz. Type IDC supports 23-26 AWG solid or strand cable. It provides 180/90 pressure-line style and supports for 568A and 568B wiring schemes. Use for 110 or Krone termination tools. The 8 Pin insert has good flexibility and abrasion resistance.

**Electrical Specifications:**

- Dielectric Strength: 1000V RMS for 1min
- Insulation Resistance: 500.Mohm min
- Contact Resistance: 20mΩ per contact
- Current rating: 1.5A @20°C
- Temperature range: -10°C to +75°C
- Humidity: 10% - 65%

**Physical Specifications:**

- PC housing material
- Flame retardant UL 94V-0
- IDC contact: 100u inch nickel plated over phosphor bronze
- IDC operating life: minimum 250 re-terminations
- Jack contact: Phosphor bronze, 50μ inch gold plating over nickel plating in contact area
- Jack operating life: minimum 1000 insertions
- PCB: FR-4



(Unit=mm)

**Reference Certified:**

- UL/cUL Listed ; ETL verified by manufactured.

**Order Information:**

Type	ESCAB P/N	Description	Packing
Cat 5e 90° Unshielded RJ45	ES-C5-U90-T1	90° Super Category 5e Unshielded Keystone Jack, Support Up to 250MHz	1 pcs/pc
Cat 5e 180° Unshielded RJ45	ES-C5-U180-T2	180° Cat 5e Unshielded Keystone Jack, Support Up to 250MHz	1 pcs/pc



# KEYSTONE JACK CAT6

## UTP



**Features:**

- Higher port density
- Suitable for mounting into floor boxes directly
- Performance conforms to ANSI/TIA-568-C.2, ISO/IEC 11801 and EN50173-1 Category 6 specification -1
- Support T568 A&B wiring & easy installation.
- Offers total solution of your local area networking.
- IDC connector can accept 22 - 24 AWG solid and stranded cables.
- Terminate using 110 or krone tools.
- RoHS compliant



**Application:**

- 10Base-T/100Base-TX/100Base-T4/1000Base-T
- ATM-25/ATM-51/ATM-155/100VG-AnyLan
- TR-4/TR-16 Active/TR16 Passive
- 100VG-AnyLan

**Typical Specification:**

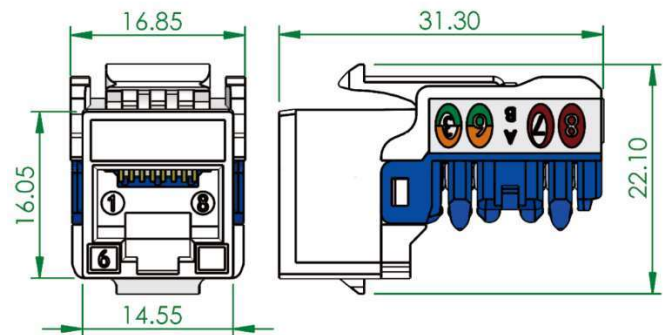
- Cat.6 180 / 90 Unshielded Shuttered Keystone Jack has been designed to meet the needs of both the professional installer and end user, and supports for 568A and 568B wiring schemes. Use for 110 or Krone termination tools. The 8 Pin insert has good flexibility and abrasion resistance.

**Electrical Specification:**

- Dielectric Strength: 1000V RMS for 1min
- Insulation Resistance: 500 Mohm min
- Contact Resistance: < 20mΩ per contact
- Current rating : 1.5A @20°C
- Temperature range: -40°C to +70°C
- Humidity: 10% - 65%

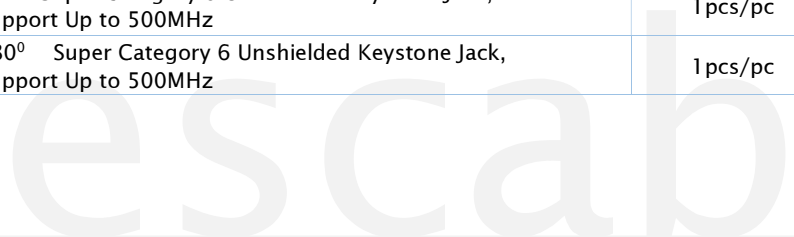
**Physical Specifications:**

- Housing cap and shutter material: high impact plastic
- Flame retardant UL 94V-0
- IDC contact: 100u inch nickel plated over phosphor bronze
- IDC operating life: minimum 250 re-terminations
- Jack contact: Phosphor bronze, 50μ inch gold plating over nickel plating in contact area
- Jack operating life: minimum 1000 insertions
- PCB: FR-4



**Order Information:**

Type	ESCAB P/N	Description	Packing
Cat.6 90° Unshielded RJ45	ES-C6-U90-T1	90° Super Category 6 Unshielded Keystone Jack, Support Up to 500MHz	1 pcs/pc
Cat.6 180° Unshielded RJ45	ES-C6-U190-T2	180° Super Category 6 Unshielded Keystone Jack, Support Up to 500MHz	1 pcs/pc



# KEYSTONE JACK RJ45

## CAT6 / CAT6A

### FTP | STP

**Features:**

- Performance conforms to ANSI/TIA-568-C.2, ISO/IEC 11801 and EN50173-1 Category 6 specification -1
- Support T568 A&B wiring & easy installation.
- Compact design ideal for high density applications
- Offers total solution of your local area networking.
- IDC connector can accept 22-26 AWG solid and stranded cables.
- Tool less design allows all 4 pairs to be mass terminated with a pair of channel locks
- RoHS compliant



**Application:**

- 10GBASE-T Ethernet
- 1000BASE-Tx Gigabit Ethernet
- 1000BASE-T Gigabit Ethernet
- 100BASE-Tx Fast Ethernet.
- 10BASE-T Ethernet.
- Voice, Video and other applications

**Typical Specification:**

- Die-casting shielded 180 tool less keystone jack is designed for installer's convenience, which is made of zinc alloy and using the "Die-casting" technic especial construction complete 360 shielding, protects against EMI/RFI. It is fully backward compatible to all lower standards, marking cabling system. Tool less design saves a lot of time on termination, releasing from fussy processes of punching down and removing cables by its smart design.

**Electrical Specification:**

- Dielectric Strength: 1000V RMS for 1min
- Insulation Resistance: 500 Mohm min
- Current Rating: 1.5Amp Max.
- Admissible conductor: 22AWG ~ 26AWG insulation wire
- Contact Resistance: < 20mΩ per contact
- Temperature range: -40°C to +70°C
- Humidity: 10% - 90% - non condensing



**Physical Specifications:**

- Body material Housing PC / Body Zinc Die-casting (flame retardant UL 94V-0)
- IDC contact: 100u inch nickel plated over phosphor bronze
- IDC operating life: minimum 350 re-terminations
- Jack contact: Phosphor bronze, 50μ inch gold plating over nickel plating in contact area
- Jack operating life: minimum 750 insertions
- PCB: FR-4

**Order Information:**

Type	ESCAB P/N	Description	Patch panel recommend
Jack RJ45 CAT.6 Shielded	EJ-C6-S180HP	Cat.6 180 Fully Shielded Slim Die-Casting Toolless Keystone Jack	ES-HSW-24
Jack RJ45 CAT.6A Shielded	EJ-C6A-S180HP	Cat.6A 180 Fully Shielded Slim Die-Casting Toolless Keystone Jack	

# CATEGORY 3 UTP

**Features:**

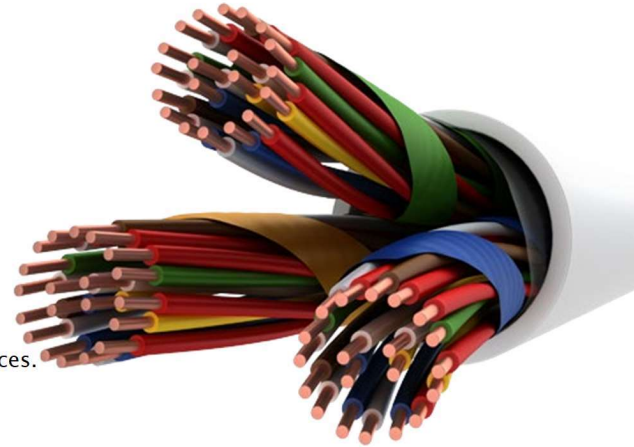
- ANSI/TIA/EIA 568.B2-CAT3
- CENELEC EN 50288 ; EN 50173 class C
- IEC 61156-5 CAT3
- ISO/IEC11801 CLASS C
- IEC 60332-1-2

(\*) We Implemented RoHS Compliance for the Requirement of European Union Issued Directive 2002/95/EC.

**Approved:** UL Listed, ETL Verified

**Application:**

- Exceptional 100-Ohm series cables for both analog and digital services.
- Voice data, 16MHz.
- This cable is used in indoor installations, telephone exchanges and subscriber distributions, signal and data transmission.



**Electrical Specifications:**

- Impedance 100 Ohm +/- 15 Ohm
- DC conductor resistance(max) 94 ohm/Km
- Voltage test DC 1500 V/min
- Minimum Insulation Resistance 1500 MOhm.Km @20°C
- Mutual capacitance at frequency 5.6 nF/100m @1KHz
- Nominal velocity propagation 66%
- Operation Voltage (max) 80V

**Cables Construction:**

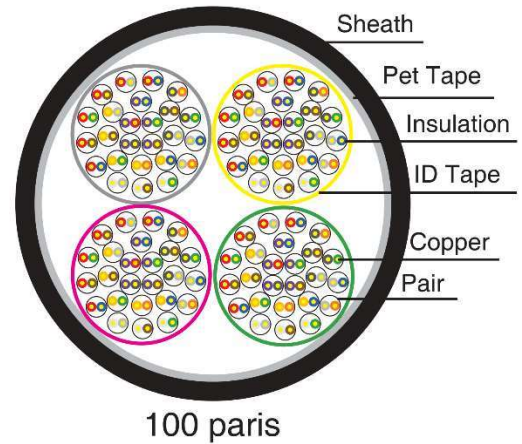
- Conductor: 24AWG Solid Bare copper
- Insulation PE
- Core type Twisted pair cables
- Outer sheath PVC or LSHF flame retardant |
- Grey color.

**Operation Specifications:**

- Minimum bending radius 10 x D (mm)
- Operating Temperature -30°C to + 70°C

**Typical Performance:**

NEXT	MHz	1	4	8	10	16
	dB	44.3	35.3	30.8	29.3	26.2



**Order Information:**

Ref P/N - PVC	Ref P/N LSHF	Outer Diameter (mm)	Cable Size	Type	Packing
EC3U004P-01	EC3U004P-11	5.0	4 x 2 x 24AWG	UTP	500/1000
EC3U025P-01	EC3U025P-11	11.5	25 x 2 x 24AWG	UTP	500/1000
EC3U050P-01	EC3U050P-11	15.0	50 x 2 x 24AWG	UTP	500/1000
EC3U100P-01	EC3U100P-11	21.00	100 x 2 x 24AWG	UTP	500/1000





# CATEGORY 5e MULTI-PAIRS

## UTP

**Features:**

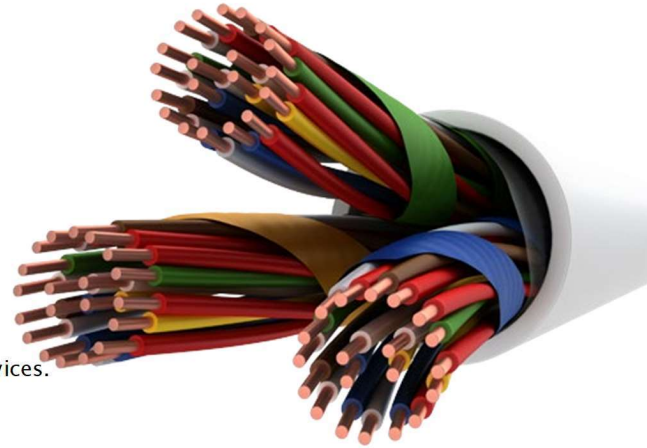
- ANSI/TIA/EIA 568.B2-CAT5
- CENELEC EN 50288 ; EN 50173 class D
- IEC 61156-5 CAT5
- ISO/IEC11801 CLASS D
- IEC 60332-1-2

(\*) We Implemented RoHS Compliance for the Requirement of European Union Issued Directive 2002/95/EC.

**Approved:** UL Listed, ETL Verified

**Application:**

- Exceptional 100-Ohm series cables for both analog and digital services.
- Voice data, Ethernet protocol 100MHz.
- This cable is used in indoor installations, telephone exchanges and subscriber distributions, signal and data transmission.



**Electrical Specifications:**

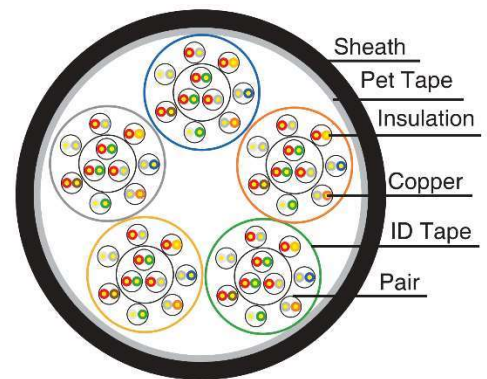
- Impedance 100 Ohm +/- 15 Ohm
- DC conductor resistance(max) 94 ohm/Km
- Voltage test DC 1500 V/min
- Minimum Insulation Resistance 1500 M.Ohm.Km @20°C
- Mutual capacitance at frequency 5.6 nF/100m @1KHz
- Nominal velocity propagation 68%
- Operation Voltage (max) 80V

**Cables Construction:**

- Conductor: 24AWG Solid Bare copper
- Insulation PE with color following TIA
- Core type Twisted pair cables
- Outer sheath PVC or LSHF flame retardant | Grey color.

**Operation Specifications:**

- Minimum bending radius 10 x D (mm)
- Operating Temperature -30°C to + 70°C



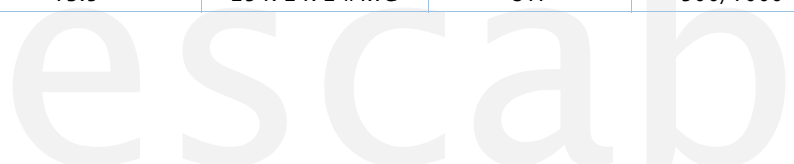
50 paris

**Typical Performance:**

NEXT	MHz	1	4	8	10	16	20	31.25	62.5	100
	dB	60	53.5	48.6	47.0	43.6	40.3	38.7	33.6	30.1

**Order Information:**

Ref P/N - PVC	Ref P/N - LSHF	Outer Diameter (mm)	Cable Size	Type	Packing
EC5U025P-01	EC5U025P-11	13.5	25 x 2 x 24AWG	UTP	500/1000





# DISCONNECTION MODULES | 10 PAIRS

**Order Information:**

□ P/N : EC3-10P-DCON

10-pair Connection Module for Back Mount Frame mounting



**Applications:**

- Superior high speed data and voice cross connect modules. Available in 8 and 10 pair disconnect versions. These modules enable high speed LAN and WAN systems maximum headroom in transmission performance.
- Suitable for use in all xDSL circuits
- Robust long-term environmental stability allows both indoor and outdoor installation.
- This is proven technology which has become the 'industry standard' in most countries. The gas tight contacts ensure a reliable and long lasting connection. These modules can be either patched, jumped and used in a patch by exception configuration.

Note: When installing patch cords, ensure that the latch is located at the bottom of the module and that it clips into the holes provided.

**Technical Specifications:**

**Environment**

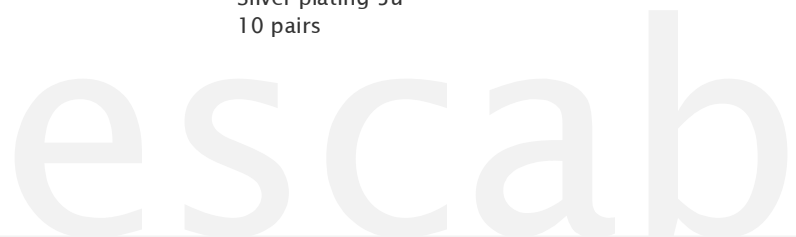
- Environment condition (-40°C to +90°C)
- Operation condition (-20°C to +80°C)
- Atmospheric pressure 70-106KPa
- Relative humidity <85% (30 C)

**Mechanical Specifications**

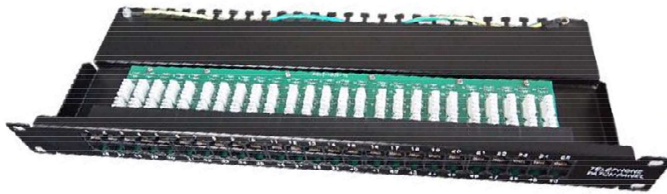
- Pulling-out force ≥25N
- Diameter of connection wire 22AWG-26AWG (0.4-0.65mm)
- Insulation resistance ≥10GΩ
- Intermediate resistance between the reed terminators ≤3mΩ
- Contact resistance ≤1 mΩ
- Dielectric strength 2 kVeff
- Impulse voltage resistance 3.6kV(8/20)
- Operating voltage for basic insulation 210Vdc, 150VeffTNV
- Pollution class II
- Insulation material class I
- Transient over-voltage for basic insulation 2.5kV
- Current carrying capacity ,disconnection module, connection module 10kA / 5kA
- IDC re-termination ≥200 cycles
- Number of test cord insertions ≥750
- Transmission performance ≥TIA 568B CATEGORY 5

**Material and package**

- Plastic components PBT(UL94V-0) or ABS(UL-94V-0)
- Contact material Phosphor bronze(Qsn6.5-0.1)
- Contact plating Silver plating 5u "
- Specification 10 pairs



# PATCH PANEL CAT3 VOICE



**Material:**

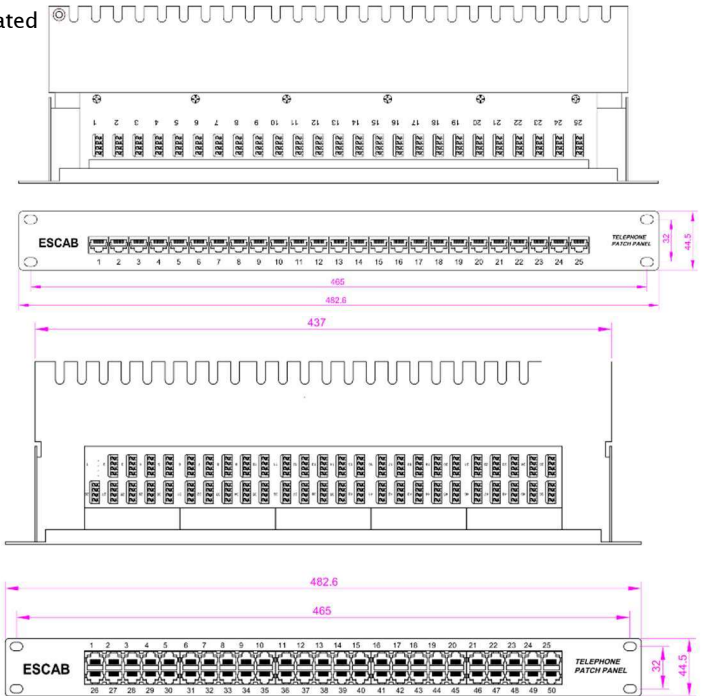
- Bottom panel: Metallic Panel (SPCC)
- RJ-45 Jack: Housing-PBT/8P8C 6 micro inches gold plated
- PCB: FR-4 / 1.6mm UL-94V0
- IDC Body: Fireproof ABS UL-94V0
- IDC Pin: Bronze & Tinned
- IDC Description: For 22-26AWG  
For 110 or Krone punch-down tool

**Electrical Specification:**

- Insulation resistance: 500M.Ohms (min.)
- Contact resistance: 20M Ohm (max.)
- Current rating: 1.5Amps
- DC resistance: 0.1 Ohm (max.)
- Withstanding Voltage: 1000 VAC RMS @60MHz/1Min.

**Mechanical Specifications:**

- IDC Punch down cycle: Over 250 cycles (min.)
- RJ-45 Jack Insertion cycle: Over 2000 cycles (min.)
- Operation Temperature: -40°C to +70°C



**Order Information:**

Ref P/N	Description
EC3-25P-PATVOI	Patch Panel CAT3 UTP 25Port - Voice
EC3-50P-PATVOI	Patch Panel CAT3 UTP 50Port - Voice



# RJ-45 PLUGS

**Specification:**

- Housing: Polycarbonate
- Contact: Copper alloy 50u" gold over nickel
- 

**Mechanical:**

- Cable-to-Plug tensile Round & flat cable available
- Strength: 20 lbs. min.
- Durability: 750 cycle min.
- 

**Function Description:**




- Exceeds TIA/EIA-568B requirements for 4 pair application
- Exceeds NEXT requirements for Cat.6 cables

Ref P/N	Description
ERJ45-C5UTP	RJ45 plug for unshielded solid wire 26-23AWG (3 prong).
ERJ45-C6UTP	RJ45 Plug W/Insert & Separator For Cat 6 UTP Solid Cable
ERJ45-C6STP	RJ45 Plug W/Insert, Separator & Boot For Cat 6 STP Solid Cable, I.D.=6.0mm
ERJ45-C6aSTP	RJ45 Plug W/Insert, Separator & Boot For Cat 6A STP Solid Cable, I.D.=6.0mm
ERJ45-88TSK01	ISO/IEC Cat 6A, RJ45 Die-Cast Field Termination Plug for Stranded & Solid Cable, Toolless.



# CABLE MANAGEMENT

- Wider Cable Pass Through
- Holder Type
- Bar Type

Cable Management Front Type	Cable Management Holder Type	Cable Management Wider cable pass thought
<p><b>Part Number: ES-CPCM41U</b></p> <ol style="list-style-type: none"> <li>1. Management improves the look of a closet or workstation, It is an essential element for easy adds, moves or changes.</li> <li>2. Standard EIA 19" Rack and Cabinet Mount.</li> <li>3. Closed Trough-style Rack-mount Cable Managers.</li> <li>4. Keeps Cables From Becoming Tangled and Unsightly.</li> </ol>  <p>Cable Management, Metal 1U ES-CPCM41U</p>	<p><b>Part Number: ES-CPCMD1U</b></p> <ol style="list-style-type: none"> <li>1. Standard EIA 19" Rack and Cabinet Mount.</li> <li>2. Management improves the look of a closet or workstation, It is an essential element for easy adds, moves or changes, It is also crucial to maintaining cable integrity by ensuring resisted steel and Metal.</li> <li>3. Closed trough-style rack-mount cable managers</li> <li>4. Keeps cables from becoming tangled and unsightly</li> <li>5. Light weight, easy to install or remove.</li> </ol>  <p>Cable Management, Metal d-Ring 1U ES-CPCMD1U</p>	<p><b>Part Number: ES-CPCM31U</b></p> <ol style="list-style-type: none"> <li>1. Management improves the look of a closet or workstation, It is an essential element for easy adds, moves or changes.</li> <li>2. Standard EIA 19" Rack and Cabinet Mount.</li> <li>3. Closed Trough-style Rack-mount Cable Managers.</li> <li>4. Keeps Cables From Becoming Tangled and Unsightly.</li> </ol>  <p>Cable Management Metal, 13 finger. ES-CPCM31U</p>
<p>Main Body: SECC/Black Thickness: 1.5mm</p>	<p>Main Body: SECC/Black Thickness: 1.5mm</p>	<p>Main Body: SECC/Black Thickness: 1.5mm</p>
<p>Description</p>	<p>Description</p>	<p>Description</p>
<p>ESCAB Cable Management 1U</p>	<p>ESCAB Cable Management D-Ring</p>	<p>ESCAB Cable Management 13 Finger 1U</p>
<p>1U 19" Cable Management, Screw Type, Black</p>	<p>1U 19" Cable Management, Metal Holder Type, Black</p>	<p>1U 19" Cable Management, Screw Type, Black</p>



# FACEPLATE | 2-Port | Cat 6

## B626 SERIES

B626 series faceplate with Category 6 modules are available in 2-port.

- Part No.: **625B626**
- Dimensions (mm): W80.0 x H80.0mm
- Description: 2-Port Cat 6 Outlet W/Label & Door, LSA+ IDC
- Germany Style
- Temperature: -10 C~60 C
- Humidity: 10%~90%RH
- RoHS compliant, certified by TUV.
- Meet the ANSI/TIA-568-C.2, ISO/IEC 11801 2nd edition and CENELEC EN 50173-1 cabling requirements for Category 6 performance.
- Comply with requirements of ANSI/TIA-1096-A (FCC Part 68) and reliability requirements of IEC 60603-7 series for RJ45 8-way connector.



UL1863  
Communications-Circuit  
Accessories



## Faceplate with Label & Shutter

## B622 SERIES

B622 series faceplate with shutter is ideal for the installation of keystone jacks, available in 2- and 3-port, which includes label for port designation.

- Temperature: -10 C~60 C
- Humidity: 10%~90%RH
- RoHS compliant, certified by TUV.



Part No.	Description
625B622	2-Port Faceplate W/Label & Door / W80.0 x H80.0 mm
625B623	3-Port Faceplate W/Label & Door / W80.0 x H80.0 mm

# FACEPLATE | Single-Gang

## 200N SERIES

200N series faceplates are ideal for the installation of keystone jacks, available in 1-, 2- and 3-port or blank. Insert the units into plastic inserts before snap in the faceplates.

- Temperature: -10 C~60 C
- Humidity: 10%~90%RH
- RoHS compliant, Japanese style.



Part No.	Description
200N1	Single-Gang Simplex Faceplate
200N2	Single-Gang Duplex Faceplate
200N3	Single-Gang Triplex Faceplate

# Faceplate Single-Gang Flush

## 2013AFB SERIES

2013AFB Series Single-gang flush faceplates are ideal for the installation of keystone jacks, data, voice and A/V connectors, available in 1~6 ports.

- Temperature: -10 C~60 C
- Humidity: 10%~90%RH
- RoHS compliant, certified by TUV.
- U.S. TAA Compliant



Part No.	Description
2013AQ12/2013AQ15	1-port Flush Faceplate, suit for latch height 19.02mm/20.05mm
2013AQ22/2013AQ25	2-port Flush Faceplate, suit for latch height 19.02mm/20.05mm
2013AQ32/2013AQ35	3-port Flush Faceplate, suit for latch height 19.02mm/20.05mm
2013AQ42/2013AQ45	4-port Flush Faceplate, suit for latch height 19.02mm/20.05mm
2013AQ62/2013AQ65	6-port Flush Faceplate, suit for latch height 19.02mm/20.05mm





# Single-Gang | Dual-Gang | Triple-Gang Decorator Faceplate

## 2013AD SERIES

2013AD Series decorator faceplates are ideal for the installation of keystone jacks, data, voice and A/V connectors. They are designed to use with mounting frames.

It's ideal for small office, home office or residential environment. Insert the units into plastic inserts before snap in the faceplates.

- Temperature: -10 C~60 C
- Humidity: 10%~90%RH
- RoHS compliant, certified by TUV.
- American Style



Part No.	Description
2013AD1N	Single-Gang Decorator Faceplate   W70.0 x H115.0mm
2013AD2N	Dual-Gang Decorator Faceplate   W117.0 x H115.0mm
2013AD3N	Tree-Gang Decorator Faceplate   W163.0 x H115.0mm

# Single-Gang | Dual-Gang Faceplate with Label

## 2013AK SERIES

2013AK Series Single-gang & Dual-gang faceplates are ideal for the installation of keystone jacks, data, voice and A/V connectors, available in 1~12 ports.

- Temperature: -10 C~60 C
- Humidity: 10%~90%RH
- RoHS compliant, certified by TUV.
- U.S. TAA Compliant



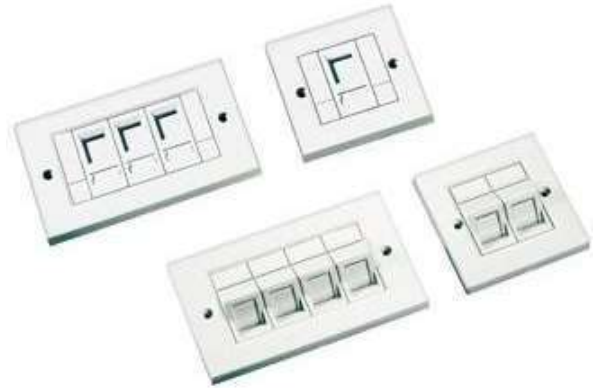
Part No.	Description
2013AK2B1	1-port Single Gang Faceplate W/Label
2013AK2B2	2-port Single Gang Faceplate W/Label
2013AK2B3	3-port Single Gang Faceplate W/Label
2013AK2B4	4-port Single Gang Faceplate W/Label
2013AK2B6	6-port Single Gang Faceplate W/Label
2013AK6B9	9-port Double Gang Faceplate W/Label
2013AK6B12	12-port Double Gang Faceplate W/Label

## 2-Port Faceplate with Shutter

2013BE / 2013BF SERIES

B626 series faceplate with shutter is ideal for the installation of keystone jacks, which available in 1-, 2-, 3- and 4-port.

- Temperature: -10 C~60 C
- Humidity: 10%~90%RH
- RoHS compliant, certified by TUV.
- U.K style



Part No.	Description
2013BE1	1-Port Single-Gang Faceplate W/Label & Door   W86.0 x H86.0mm
2013BE2	2-Port Single-Gang Faceplate W/Label & Door   W86.0 x H86.0mm
2013BE3	3-Port Dual-Gang Faceplate W/Label & Door   W146.0 x H80.0mm
2013BE4	4-Port Dual-Gang Faceplate W/Label & Door   W146.0 x H80.0mm
2013BF1	1-Port Single-Gang Faceplate W/Label & Door   W86.0 x H86.0mm
2013BF2	2-Port Single-Gang Faceplate W/Label & Door   W86.0 x H86.0mm
2013BF3	3-Port Dual-Gang Faceplate W/Label & Door   W146.0 x H80.0mm
2013BF4	4-Port Dual-Gang Faceplate W/Label & Door   W146.0 x H80.0mm

## Angled Faceplate with Label & Door

B5806 / B5815 SERIES

B5806 / B5815 Series Single-gang faceplates with shutters are ideal for the installation of keystone jacks, data, voice and A/V connectors, available in 1~4 ports.

UK Style

- Temperature: -10 C~60 C
- Humidity: 10%~90%RH
- RoHS compliant, certified by TUV.
- U.K style



Part No.	Description
625B5806N	X-Port Faceplate W/Label, Icon & Door, W80.0 x H80.0 mm
625B5815N	Y-Port Faceplate W/Label, Icon & Door X denote port of faceplate : 1,2,4 Y denote port of faceplate : 1,2