ES-TECH INTERNATIONAL SOLUTION

ES
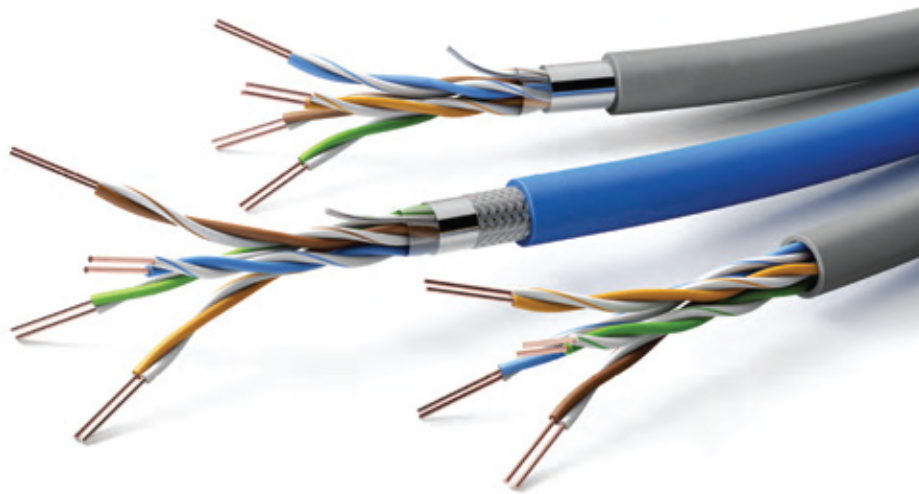
CONNECTING THE POWERED LIFE

LAN CABLE Local Area Network Cable

ES-TECH International is a technology company specialized in providing solutions for communication & Infrastructure.

Delivering proactive and proven solutions and services that help networks around the world. ES-TECH International provides solutions for broadcasting, broadband, network power and cables, especially optical/coaxial cable and comprehensive power solutions.

To keep pace with rapid changing market, ES-TECH International is expanding structured cable system/intelligence building system and network solution field by continuously developing new products through aggressive investment for R&D.

At the same time, ES-TECH International is developing new items by cooperating with Global Corporation, as well as developing its own brand to expand overseas market.

ES-TECH International will be always with you with state of the art solution which is your way to happiness.

ES CABLE

www.es-tech.com

Introduction of Business
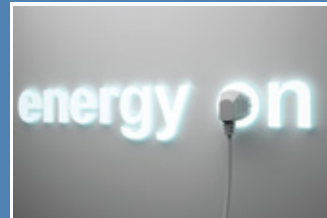
ES-TECH International Solutions

ES-TECH international is a technology company specialized in providing solutions for communication & Infrastructure. Delivering proactive and proven solutions and services that help networks around the world, ES-TECH international provides solutions for broadcasting, broadband, network power and cables, especially optical/coaxial cable and comprehensive power solutions

E S - T E C H   I N T E R N A T I O N A L

Fiber Optics

Distribution Cable
Breakout Cable
Simplex and Duplex
Drop Cable
Multi Loose Tube Cable
Adss Cable
Ribbon Cable

Broadcasting

AV Cabling Solution
SMPTE Camera Solution
AV Patching Solution

Networking

IBDN cabling solution
HFC Network solution
Network Consulting

Cables

Coax Cable
UTP Cable
Coaxial Connector

Power Supply

Square Wave UPS/PS
Sine Wave UPS/PS
Rack UPS
APD
STS
AVR

Broadband

FTTX Infra Structured
FTTH Solution
Device & Equipment

Telco

DATA Center
Core Networks
Mobile Networks
Microwave Technology

Company Infomation

ES-TECH international specialized in providing broadcasting,
communication, electronic solution.

ES-TECH international specialized in providing broadcasting, communication, electronic solution.

ES-TECH international provides most essential products which used in broadcasting & communication network service
such as broad casting solution, broadband solution, power supply, network solution, cable solution etc.

To keep pace with rapid changing market, ES-TECH international is expanding structured cable system/intelligence building
system and network solution field by continuously developing new products through aggressive investment for R&D.

Also developing new items by cooperating with Global Corporation,
at the same time developing our own brand to expand overseas market.

ES-TECH international will do our best to provide best solutions & products to our customers.

Vision

Company can last longer than 100 years

To provide superior quality consulting, services, and products that enable momentous improvements to our customers.
We are committed to being the best through our professionalism and by keeping the interests of our clients first.
We strive to develop innovative technology and fulfill our customers' needs.

Mission statements

01_ To continuously create customers value for the next 100 years.
02_ continuously find a growing industry, as well as to improve business ability for all business area.
03_ To create new markets by adopting globalization.
04_ To form a challenging & creative company culture by demonstrating innovative & creative thinking.

ES-TECH INTERNATIONAL

Company History

The below is the footprint of ES-TECH international

Company Scene

Product Line

Product Line

Product Cables

2017
Certification of "World-class product" from Ministry of Industry and Trade on Uninterruptible Power Supply for communication.
Nominated as a Military Service Designated Company (Industry) by Military Manpower Administrations.

2016
Certification of Youth-friendly 'Small Hidden Champion'
Certification of Gyeong-gi ProvinceJob Recognition Excellent Company.
Completion of new head office construction in Suwon Industrial Complex.
Nominated as a Gyeong-gi Province Women Employment Excellent Company.

2015
Expand further for fiber optic cable / Launched ESCABLE brand
Verification of greenhouse gas inventory. (carbon management system ISO14064)

2014
Selected the best company to work for by SMBA
(Small and Medium Business Administration)

2013
Selected promising small & medium business by Gyeonggi-Do Provincial Government
Submitted a new design for practical use to KIPO (Korean Intellectual Property Office)
Submitted design patent of 'Hole kit' for communication cable distributor to KIPO (Korean Intellectual Property Office)

2012
Selected best small & medium business to work for
Selected as 'a venture business' by small & medium business administration.
Awarded design award by Gyonggi province governor.

2010
Developed STS
Developed ground mount enclosure
Achieved the patent of 'dual power distribution equipment'.
Achieved the patent for rack type server system power distribution equipment

2008
Developed CATV line UPS of SUN & MOON series.
Developed small sized power supply for apartment building.
Obtained 'annex research institute certification' by KOITA
Obtained 'Innobiz certification' by small & medium business administration.

2007
Obtained 'small & medium size business certification' by administration
Obtained ISO 9001:2000 certifications

2005
Converted to corporation (ES-TECH international Inc.)
Developed APT (Auto Power Distributor)

2004
Developed CATV line UPS

2002
ES TECH NOLOGY was founded

Fiber Optics   Power   Broadcasting   Broadband   Networking   Telco   Cable

ESTECH INTERNATIONAL

Contents
Introduction of product

4 Paris cable Local area network cable

SF/UTP Cat.6A, F/UTP Cat.6, U/UTP Cat.6

음성 및 데이터 전송용 케이블로 고속 신호 전송능력을 필요로 하는 옥내 수평 및 간선 배선망에 사용.

Suitable for the horizontal indoor or indirect election cable requiring the electric transmission of the sound and data with high speed.

Detail View

SF/UTP Cat.6A

- 접 지 선 (Earth Wire; Tinned Copper)
- 도   체 (Conductor; Copper)
- 절 연 체 (Insulation; PE)
- 십자형 개재물 (Cross-Filler; PE)
- 테 이 프 (Tape; PS Tape)
- 차폐 테이프 (shield; Aluminium Mylar Tape)
- 편   조 (Shield; Copper braid)
- 피 복 체 (Sheath; PVC)

F/UTP Cat.6

- 접 지 선 (Earth Wire; Tinned Copper)
- 도   체 (Conductor; Copper)
- 절 연 체 (Insulation; PE)
- 십자형 개재물 (Cross-Filler; PE)
- 테 이 프 (Tape; PS Tape)
- 차폐 테이프 (shield; Aluminium Mylar Tape)
- 피 복 체 (Sheath; PVC)

U/UTP Cat.6

- 도   체 (Conductor; Copper)
- 절 연 체 (Insulation; PE)
- 십자형 개재물 (Cross-Filler; PE)
- 피 복 체 (Sheath; PVC)

4 Pairs cable SF/UTP Cat.6A, F/UTP Cat.6, U/UTP Cat.6

구 분 Item	페 어 수 Number of Pairs	도 체 경 Nominal Diameter of Wire (mm)	외 경 (약) Approx. Overall Diameter (mm)	중 량 (약) Approx. Weight (kg/km)	표 준 조 장 Standard Length	포 장 Packaging
SF/UTP Cat.6A	4	0.55 (23 AWG)	8.5	14.0	300m or 1000ft	Box or Reel
F/UTP Cat.6			7.0	12.2		
U/UTP Cat.6			6.5	12.0		

━ 난연등급: CM기준   ━ AWG: American Wire Gauge

competitiveness of ES - TECH

적용규격
- ANSI / EIA / TIA-568.C
- ISO / IEC 11801
- UL 444
- KS C 3342

난연등급
- UL 1581 (CMX, CM)
- UL 1666 (CMR)
- IEC 60754, 61034(LSZH)

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INTERNATIONAL

4 Pairs cable SF/UTP Cat.6A, F/UTP Cat.6, U/UTP Cat.6

주 파 수 Frequency (MHz)	입력임피던스 Input Impedance (Ohms)	특성임피던스 Characteristic Impedance (Ohms)	반사손실 Return Loss(dB) Min.	감쇄량 Attenuatopn (dB/100m) Mix.	근단누화 NEXT(dB) Min.	근단누화전력합 PSNEXT (dB/100m) Min.	원단누화 ELFEXT (dB/100m) Min.	원단누화전력합 PSELFEXT (dB/100m) Min.
1	100±15	100±6	19.0	2.0	74.3	72.3	67.8	64.8
4	100±15	100±6	21.4	3.8	65.3	63.3	55.7	52.7
8	100±15	100±6	22.6	5.4	60.8	58.8	49.7	46.7
10	100±15	100±6	23.0	6.0	59.3	57.3	47.8	44.8
16	100±15	100±6	23.0	7.7	56.3	54.3	43.7	40.7
20	100±15	100±6	23.0	8.6	54.8	52.8	41.7	38.7
25	100±15	100±6	22.3	9.6	53.3	51.3	39.8	36.8
31.25	100±15	100±6	21.6	10.8	51.9	49.9	37.9	34.9
62.5	100±15	100±6	19.5	15.7	47.4	45.4	31.8	28.8
100	100±15	100±6	18.1	20.2	44.3	42.3	27.8	24.8
125	100±22	100±6	17.4	22.9	42.9	40.9	25.8	22.8
155.52	100±22	100±6	16.8	22.8	41.4	39.4	23.9	20.9
175	100±22	100±6	16.4	27.6	40.7	38.7	22.9	19.9
200	100±22	100±6	16.0	29.8	39.8	37.8	21.7	18.7
250	100±32	100±6	15.3	33.8	38.3	38.3	19.8	16.8

━ U/UTP Cat.6. 4P 기준 데이터. 옥내 수평 및 중심회선에만 적용. (Based on U/UTP Cat.6. Applicable for horizontal and backbone cables only)
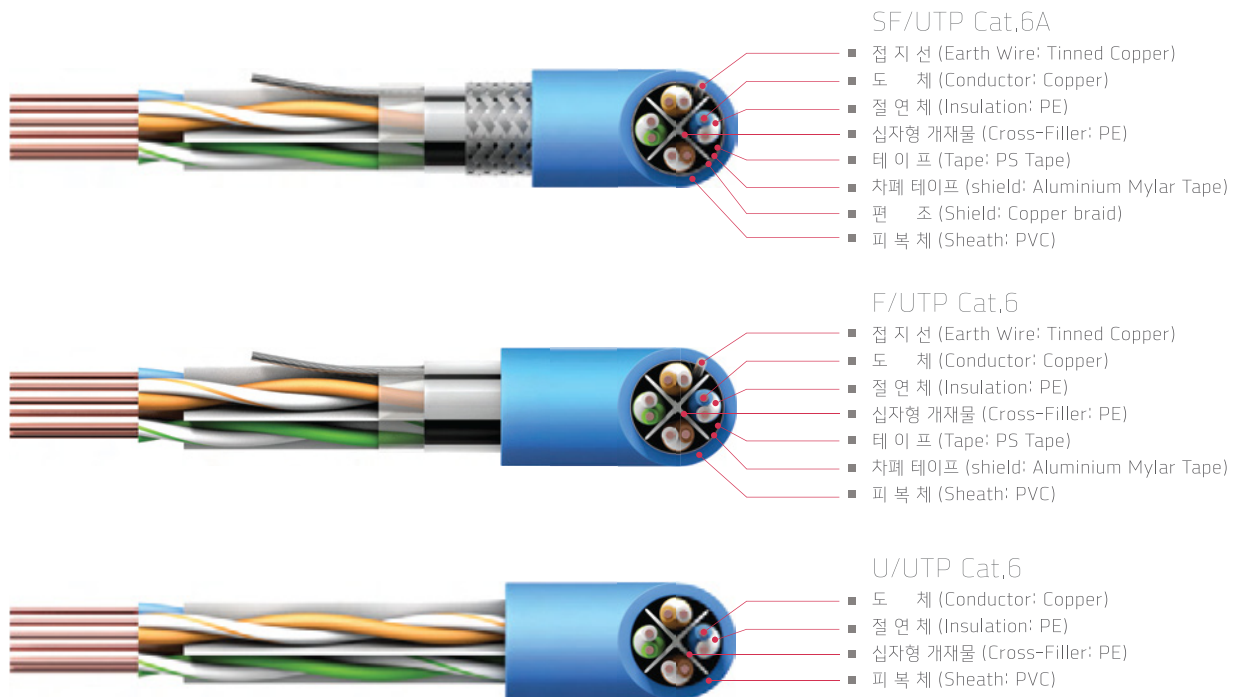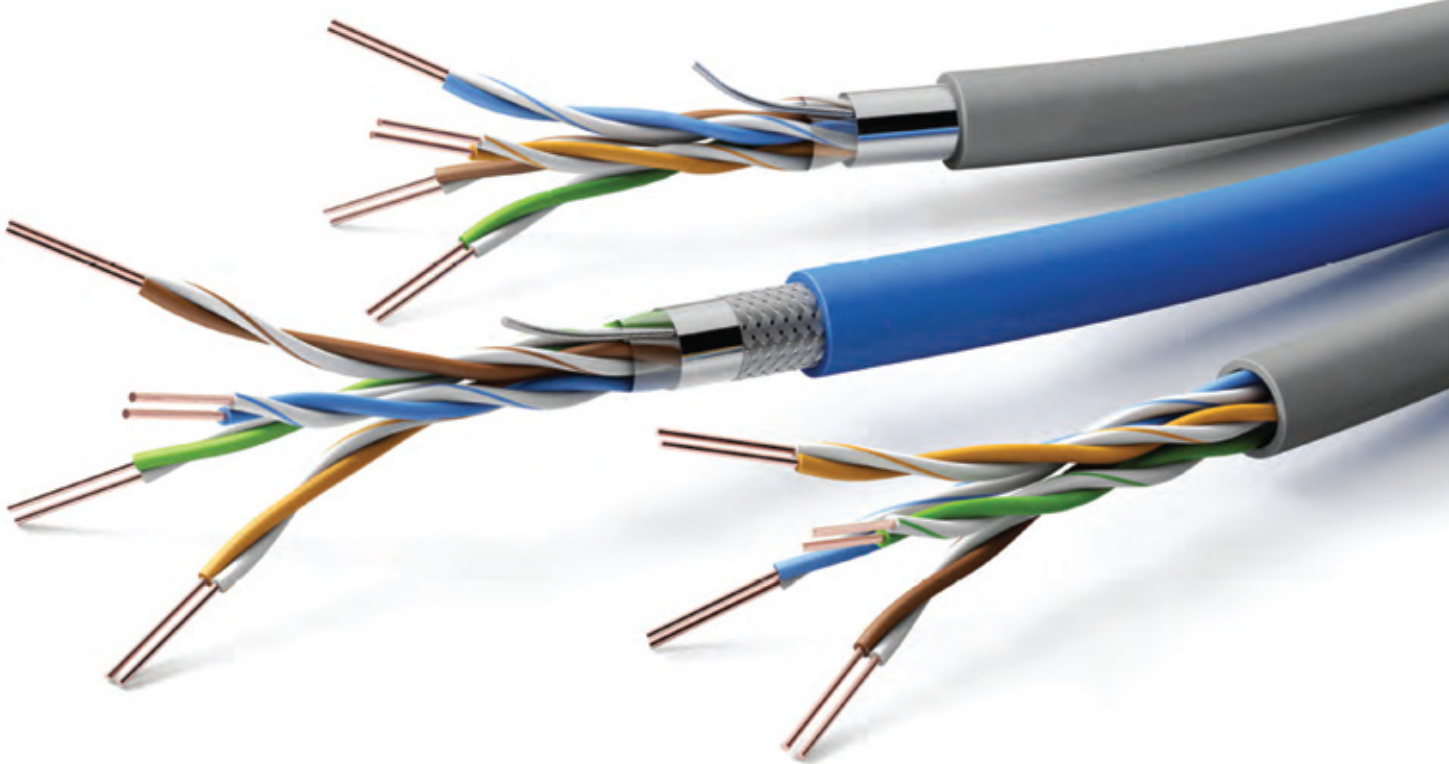
이에스케이블
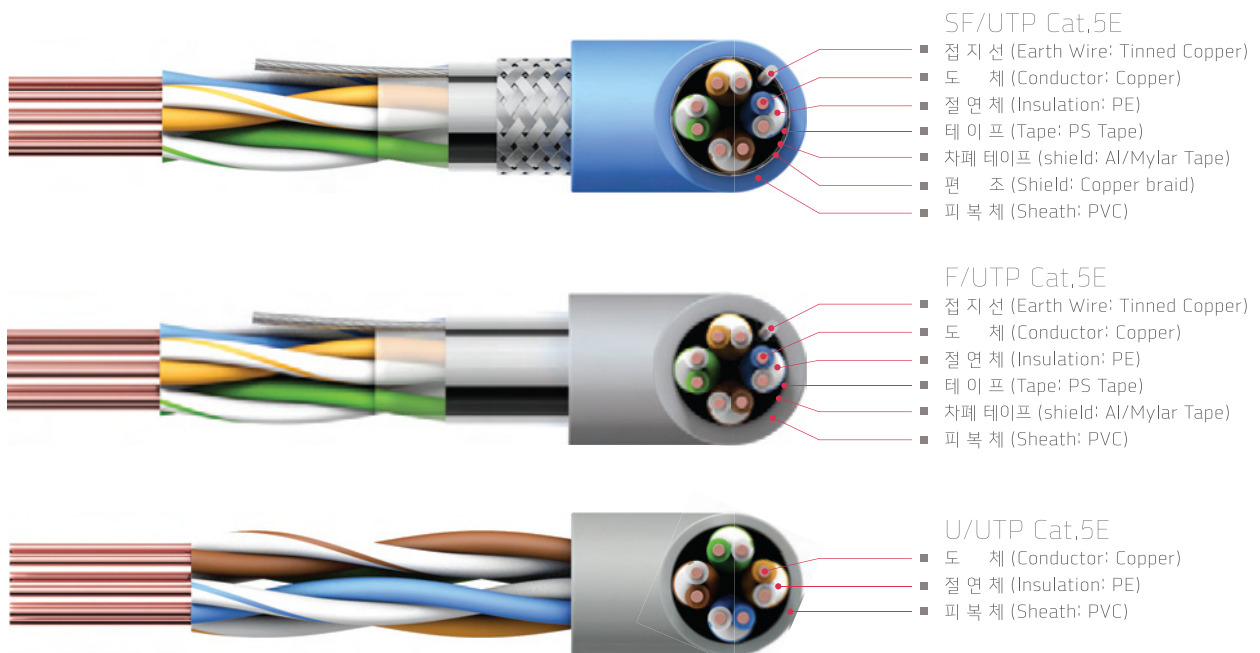ES CABLE

4 Paris cable   Local area network cable

SF/UTP Cat.5E, F/UTP Cat.5E, U/UTP Cat.5E
음성 및 데이터 전송용 케이블로 옥내 수평 및 간선 배선망에 사용.
Suitable for the horizontal indoor or indirect election cable requiring the electric transmission of the sound and data.

| Detail View

SF/UTP Cat.5E
- 접 지 선 (Earth Wire: Tinned Copper)
- 도   체 (Conductor: Copper)
- 절 연 체 (Insulation: PE)
- 테 이 프 (Tape: PS Tape)
- 차폐 테이프 (shield: Al/Mylar Tape)
- 편   조 (Shield: Copper braid)
- 피 복 체 (Sheath: PVC)

F/UTP Cat.5E
- 접 지 선 (Earth Wire: Tinned Copper)
- 도   체 (Conductor: Copper)
- 절 연 체 (Insulation: PE)
- 테 이 프 (Tape: PS Tape)
- 차폐 테이프 (shield: Al/Mylar Tape)
- 피 복 체 (Sheath: PVC)

U/UTP Cat.5E
- 도   체 (Conductor: Copper)
- 절 연 체 (Insulation: PE)
- 피 복 체 (Sheath: PVC)

4 Pairs cable SF/UTP Cat.5E, F/UTP Cat.5E, U/UTP Cat.5E

구 분 Item	페 어 수 Number of Pairs	도 체 경 Nominal Diameter of Wire (mm)	외 경 (약) Approx. Overall Diameter (mm)	중 량 (약) Approx. Weight (kg/km)	표 준 조 장 Standard Length	포 장 Packaging
SF/UTP Cat.5E		0.50 (24 AWG)	7.0	18	300m or 1000ft	Box or Reel
F/UTP Cat.5E	4		6.0	15		
U/UTP Cat.5E			5.0	10		

— 난연등급: CM기준   — AWG: American Wire Gauge

competitiveness of ES – TECH

적용규격
- ANSI / EIA / TIA-568.C
- ISO / IEC 11801
- UL 444
- KS C 3342

난연등급
- UL 1581 (CMX, CM)
- UL 1666 (CMR)
- IEC 60754, 61034(LSZH)

ES-
TECH
INTERNATIONAL

4 Pairs cable SF/UTP Cat.5E, F/UTP Cat.5E, U/UTP Cat.5E

| 주 파 수 Frequency (MHz)	반사손실 Return Loss(dB) Min.	감쇄량 Attenuatopn (dB/100m) Mix.	근단누화 NEXT(dB) Min.	근단누화전력합 PSNEXT (dB/100m) Min.	원단누화 ELFEXT (dB/100m) Min.	원단누화전력합 PSELFEXT (dB/100m) Min.
0.772	19.0	1.8	67.0	64.0	66.0	63.0
1	20.0	2.0	65.3	62.3	63.8	60.8
4	23.0	4.1	56.3	53.3	51.7	48.7
8	24.5	5.8	51.8	48.8	45.7	42.7
10	25.0	6.5	50.3	47.3	43.8	40.8
16	25.0	8.2	47.3	44.3	39.7	36.7
20	25.0	9.3	45.8	42.8	37.7	34.7
25	24.3	10.4	44.3	41.3	35.8	32.8
31.25	23.6	11.7	42.9	39.9	33.9	30.9
62.5	21.5	17.0	38.4	35.4	27.8	24.8
100	20.1	22.0	35.3	32.3	23.8	20.8

— U/UTP Cat.6. 4P 기준 데이터. 옥내 수평 및 중심회선에만 적용. (Based on U/UTP Cat.6. Applicable for horizontal and backbone cables only)

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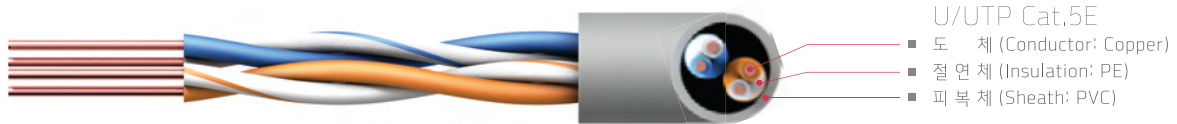ES CABLE

2 Paris cable Local area network cable

U/UTP Cat.5E

음성 및 데이터 전송용 케이블로 옥내 수평 및 간선 배선망에 사용.

Suitable for the horizontal indoor or indirect election cable requiring the electric transmission of the sound and data.

▌Detail View

U/UTP Cat.5E

- 도   체 (Conductor; Copper)
- 절 연 체 (Insulation; PE)
- 피 복 체 (Sheath; PVC)
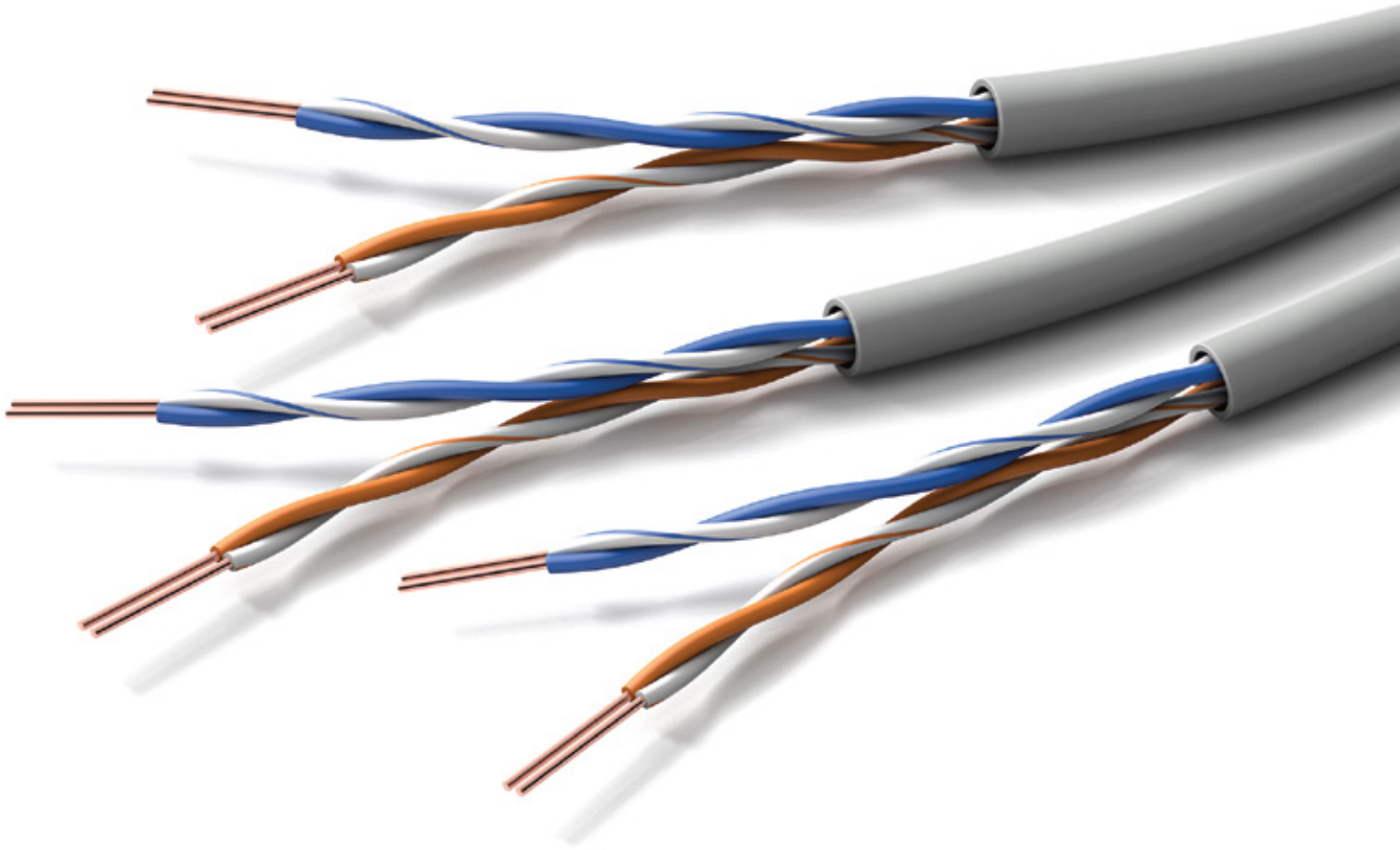
2 Pairs cable U/UTP Cat.5E

구 분 Item	페 어 수 Number of Pairs	도 체 경 Nominal Diameter of Wire (mm)	외 경 (약) Approx. Overall Diameter (mm)	중 량 (약) Approx. Weight (kg/km)	표 준 조 장 Standard Length	포 장 Packaging
U/UTP Cat.5E	2	0.50 (24 AWG)	4.5	6	300m or 1000ft	Box

— 난연등급: CM기준　— AWG: American Wire Gauge

competitiveness of ES – TECH

적용규격
- ANSI / EIA / TIA-568.C
- ISO / IEC 11801
- UL 444
- KS C 3342

난연등급
- UL 1581 (CMX, CM)
- UL 1666 (CMR)
- IEC 60754, 61034(LSZH)

ES-
TECH
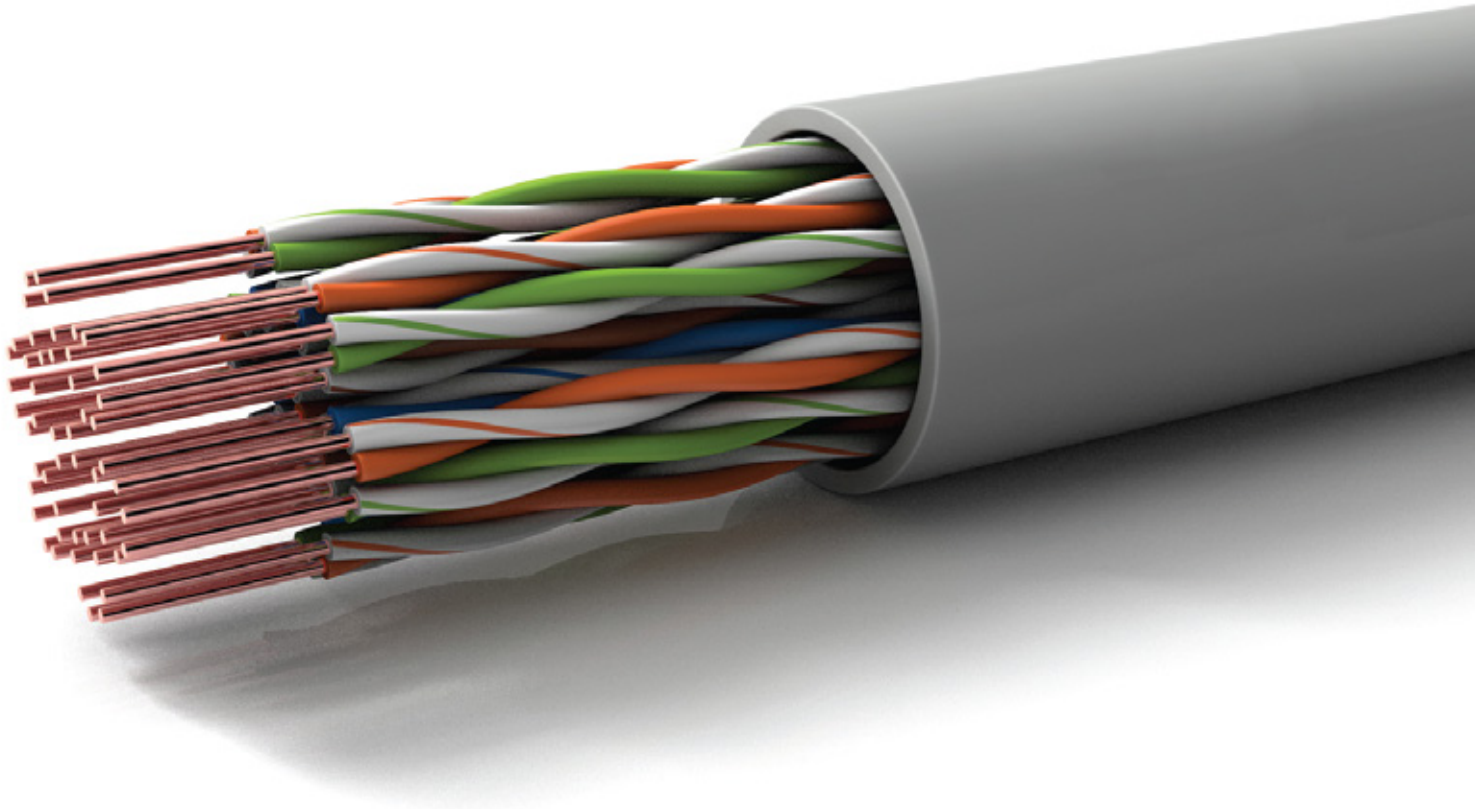INTERNATIONAL

2 Pairs cable U/UTP Cat.5E

주 파 수 Frequenct (MHz)	반사손실 Return Loss(dB) Min.	감쇄량 Attenuatopn (dB/100m) Mix.	근단누화 NEXT(dB) Min.
0.772	-	1.8	64
1	23	2.0	62
4	23	4.1	53
8	23	5.8	48
10	23	6.5	47
16	23	8.2	44
20	23	9.3	42
25	22	10.4	41
31.25	21	11.7	39
62.5	18	17.0	35
100	16	22.0	32

이에스케이블 ES CABLE

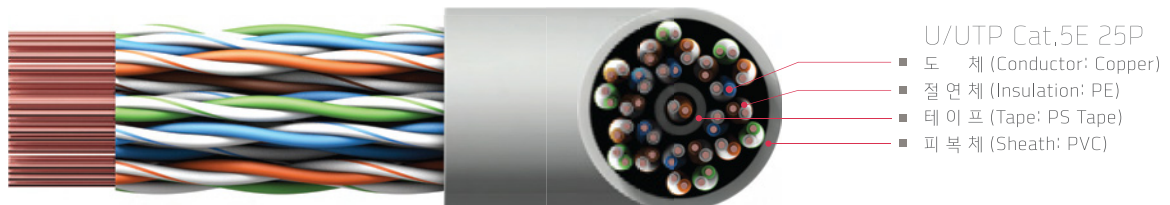# Multi–Paris cable   <small>Local area network cable</small>

Cat.5E (25P), Cat.5 (25P~128P)

음성 및 데이터 전송용 케이블로 옥내 수평 및 간선 배선망에 사용.

Suitable for the horizontal indoor or indirect election cable requiring the electric transmission of the sound and data.

▌ Detail View

U/UTP Cat.5E 25P
- 도　체 (Conductor : Copper)
- 절 연 체 (Insulation : PE)
- 테 이 프 (Tape : PS Tape)
- 피 복 체 (Sheath : PVC)

◢ **Multi-pairs cable** Cat.5E (25P), Cat.5 (25P~128P)

구 분 Item	페 어 수 Number of Pairs	도 체 경 Nominal Diameter of Wire (mm)	외 경 (약) Approx. Overall Diameter (mm)	중 량 (약) Approx, Weight (kg/km)	포 장 Packaging
Cat.5E	25	0.5mm(24 AWG)	13.0	200	Drum
Cat.5	50	0.5mm(24 AWG)	20.0	380	
Cat.5	100	0.5mm(24 AWG)	26.0	810	
Cat.5	128	0.5mm(24 AWG)	28.0	900	

— 난연등급: CM기준   — AWG: American Wire Gauge

competitiveness of ES – TECH

적용규격
- ANSI / EIA / TIA-568.C
- ISO / IEC 11801
- UL 444
- KS C 3342

난연등급
- UL 1581 (CMX, CM)
- UL 1666 (CMR)
- IEC 60754, 61034(LSZH)

ES-
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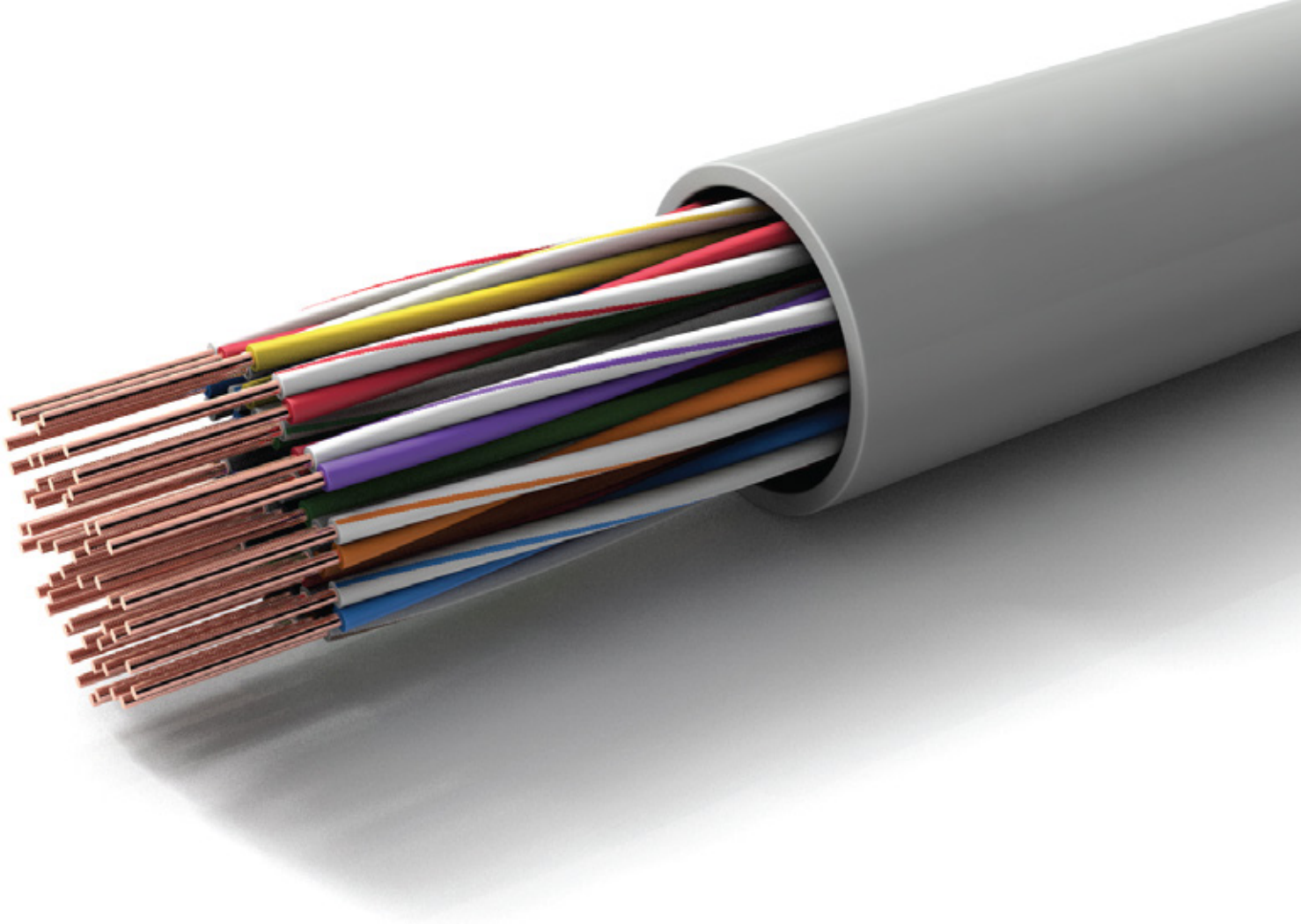
◢ **Multi-pairs cable** Cat.5E (25P), Cat.5 (25P~128P)

주 파 수 Frequency (MHz)	반사손실 Return Loss(dB) Min.	감쇄량 Attenuatopn (dB/100m) Mix.	근단누화 NEXT(dB) Min.
0.772	–	1.8	64
1	23	2.0	62
4	23	4.1	53
8	23	5.8	48
10	23	6.5	47
16	23	8.2	44
20	23	9.3	42
25	22	10.4	41
31.25	21	11.7	39
62.5	18	17.0	35
100	16	22.0	32

이에스케이블
ES CABLE

Multi-Paris cable · Local area network cable

Cat.3 (25P ~ 200P)

음성 및 데이터 전송용 케이블로 옥내 수평 및 간선 배선망에 사용.

Suitable for the horizontal indoor or indirect election cable requiring the electric transmission of the sound and data.

❙ Detail View

U/UTP Cat.3

- 도　체 (Conductor: Copper)
- 절 연 체 (Insulation: PE)
- 테 이 프 (Tape: PS Tape)
- 피 복 체 (Sheath: PVC)

◪ Multi-pairs cable Cat.3 (25P~200P)

구 분 Item	페 어 수 Number of Pairs	도 체 경 Nominal Diameter of Wire (mm)	외 경 (약) Approx. Overall Diameter (mm)	중 량 (약) Approx, Weight (kg/km)	포 장 Packaging
Cat.3	25	0.5mm(24 AWG)	12	170	Drum
	50	0.5mm(24 AWG)	14	300	
	75	0.5mm(24 AWG)	16	450	
	100	0.5mm(24 AWG)	21	570	
	150	0.5mm(24 AWG)	25	800	
	175	0.5mm(24 AWG)	27	900	
	200	0.5mm(24 AWG)	29	1050	

— 난연등급: CM기준   — AWG: American Wire Gauge

competitiveness of ES – TECH

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적용규격
- ANSI / EIA / TIA-568.C
- ISO / IEC 11801
- UL 444
- KS C 3342

난연등급
- UL 1581 (CMX, CM)
- UL 1666 (CMR)
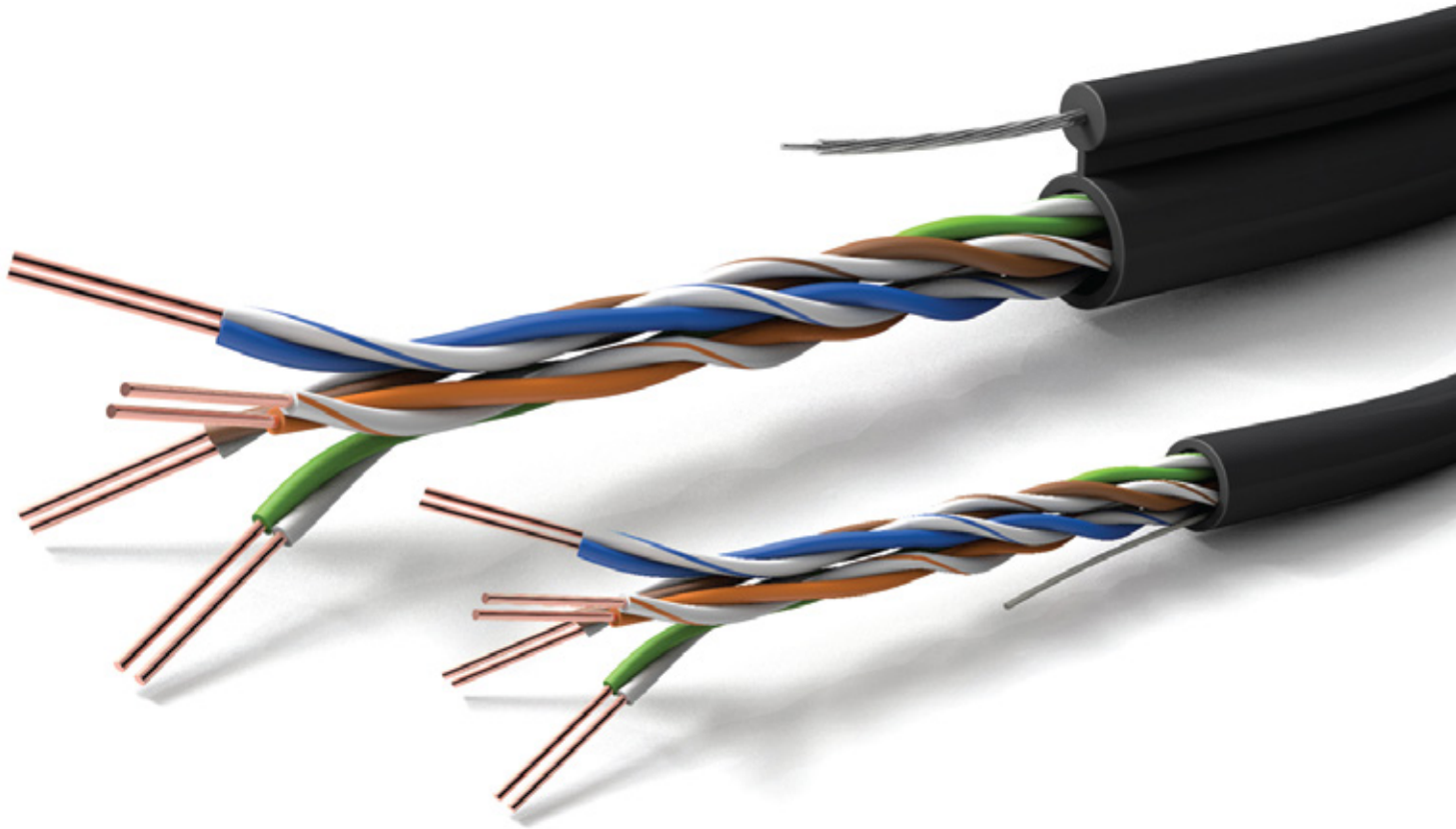- IEC 60754, 61034(LSZH)

◪ Multi-pairs cable Cat.3 (25P~200P)

주 파 수 Frequency (MHz)	반사손실 Return Loss(dB) Min.	감쇄량 Attenuatopn (dB/100m) Mix.	근단누화 NEXT(dB) Min.
0.772	-	2.2	43
1	12	2.6	41
4	12	5.6	32
8	12	8.5	27
10	12	9.7	26
16	12	13.1	23

이에스케이블
ES CABLE

Outdoor LAN cable

옥외 A형 4P (U/UTP 4P with self-supported for outdoor use)
옥외 B형 4P (U/UTP 4P without self-supported for outdoor use)

▌Detail View

U/UTP Cat5E 4P
■ 지 지 선
(Self-Supporting: Steel Wire)
■ 도   체 (Conductor: Copper)
■ 절 연 체 (Insulation: PE)
■ 피 복 체 (Sheath: PVC)

U/UTP Cat5E 4P
■ 지 지 선 (Self-Supporting: Aramid Yarn)
■ 도   체 (Conductor: Copper)
■ 절 연 체 (Insulation: PE)
■ 피 복 체 (Sheath: PVC)
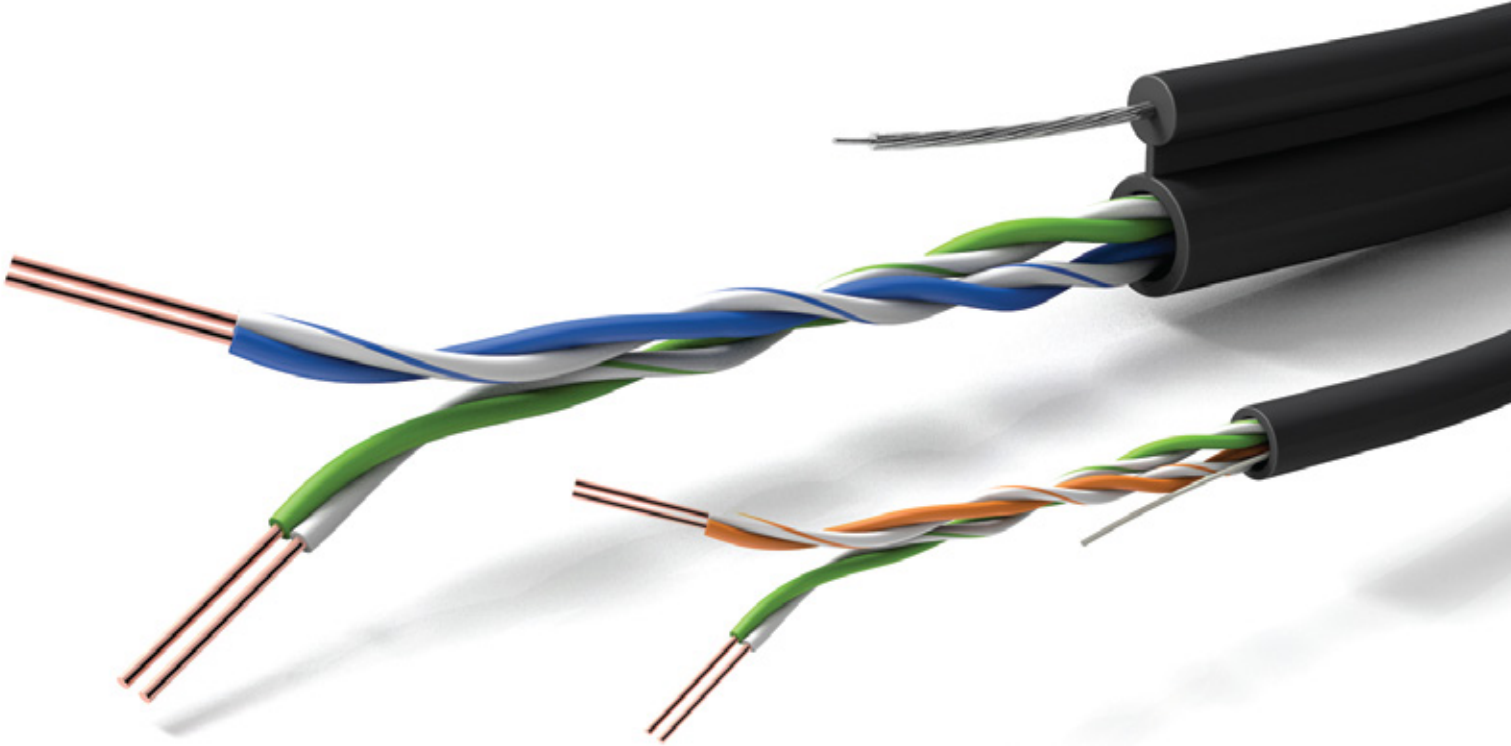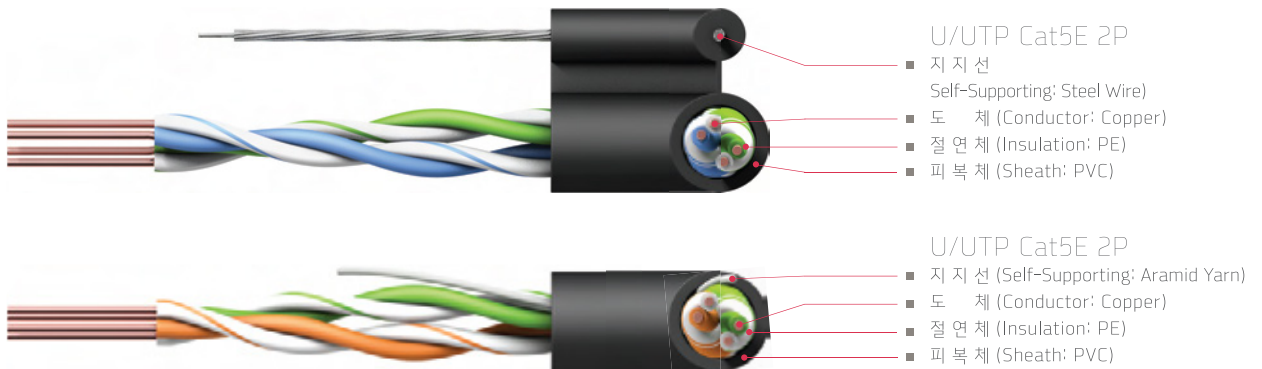
Outdoor Lan cable

옥외 A형 2P (U/UTP 2P with self-supported for outdoor use)
옥외 B형 2P (U/UTP 2P without self-supported for outdoor use)

ǀ Detail View

U/UTP Cat5E 2P
- 지 지 선
  Self-Supporting: Steel Wire)
- 도   체 (Conductor: Copper)
- 절 연 체 (Insulation: PE)
- 피 복 체 (Sheath: PVC)

U/UTP Cat5E 2P
- 지 지 선 (Self-Supporting: Aramid Yarn)
- 도   체 (Conductor: Copper)
- 절 연 체 (Insulation: PE)
- 피 복 체 (Sheath: PVC)

이에스케이블

◤ **Outdoor Lan cable** U/UTP (CAT.5E 4P, 2P)

구 분 Item	페 어 수 Number of Pairs	도 체 경 Nominal Diameter of Wire (mm)	외 경 (약) Approx. Overall Diameter (mm)	중 량 (약) Approx. Weight (kg/km)	포 장 Packaging
LAN-CAT.5E/CM	1	24 AWG	4.0×7.3	9	Box
	2		4.5×7.3	11	
	4		6.0×7.3	15	

— KT 인증 — 피복색상 : 흑색 (Color of Sheath: Black)

competitiveness of ES – TECH

적용규격
- ANSI / EIA / TIA-568.C
- ISO / IEC 11801
- UL 444
- KS C 3342

난연등급
- UL 1581 (CMX, CM)
- UL 1666 (CMR)
- IEC 60754, 61034(LSZH)

ES-
TECH
INTERNATIONAL

◤ **Outdoor Lan cable** U/UTP (CAT.5E 4P, 2P)

주 파 수 Frequency (MHz)	반사손실 Return Loss(dB) Min.	감쇄량 Attenuatopn (dB/100m) Mix.	근단누화 NEXT(dB) Min.	근단누화전력합 PSNEXT (dB/100m) Min.	원단누화 ELFEXT (dB/100m) Min.	원단누화전력합 PSELFEXT (dB/100m) Min.
0.772	–	1.8	67.0	64.0	66.0	63.0
1	20.0	2.0	65.3	62.3	63.8	60.8
4	23.0	4.1	56.3	53.3	51.7	48.7
8	24.5	5.8	51.8	48.8	45.7	42.7
10	25.0	6.5	50.3	47.3	43.8	40.8
16	25.0	8.2	47.3	44.3	39.7	36.7
20	25.0	9.3	45.8	42.8	37.7	34.7
25	24.3	10.4	44.3	41.3	35.8	32.8
31.25	23.6	11.7	42.9	39.9	33.9	30.9
62.5	21.5	17.0	38.4	35.4	27.8	24.8
100	20.1	22.0	35.3	32.3	23.8	20.8

Company Information

ES-TECH international is specialized in providing broadcasting, communication, electronic solutions.

ES-TECH international specialized in providing communication and infrastructure solutions for better life of humans. ES-TECH international provides a variety of fiber optic solutions and industrial power supply solutions over worldwide wire and wireless communication markets.

To keep pace with rapid changing market, ES-TECH international is expanding structured cable system/intelligence building system and network solution field by continuously developing new products through aggressive investment for R&D.

Developing better products in cooperating with global corporations in order to offer customized solutions for customer satisfaction is our primary.
ES-TECH international will be always with you with state of the art solution which is your way to happiness.

Company Products
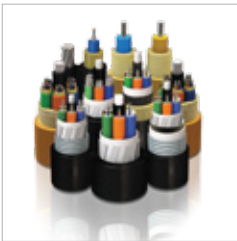
Fiber Optics Cable   Coaxial Cable   SUN UPS Series   Rack Mount UPS   PSM Series

Feeder Cable   Indoor Passive Equipments   Outdoor Passive Equipments   Connectors   Indoor Amplifer

High Quality Total Communication Solutions

Optical Devices   LAN Cable

CONNECTING THE POWERED LIFE

Communication & Infrastructure