



TRUSTED NOT TO COMPROMISE

STRUCTURED CABLING FOR COMPUTER NETWORKS

CATEGORY 6/7 LOCAL AREA NETWORK (LAN) CABLES
(CAT6 UTP PVC, CAT6 UTP LSZH, CAT6 FTP LSZH & CAT 7 SFTP LSZH)

A member of  **ASC** AMIR S.
CHINYOY
GROUP



We, therefore, have to consider and plan on a long term basis, find and build our own enterprises with a long term view of setting up not just ordinary businesses or industries but institutions surviving and lasting for many generations and fulfilling a social and national objective, which could be identified and be synonymous with our finer sentiments of patriotism, in addition to its benefits for us, and the society



Founder, Mr. Amir.S. Chinoy
Amir Chinoy
 1921-1998

Over 70 years of leading industrialization in Pakistan

GROUP HIGHLIGHTS



MEMBER COMPANIES



LEADING EQUITY PARTNERS

British Insulated Callender's Cable (BICC), UK
 General Cables, USA
 JFE Steel Corporation, Japan
 Sumitomo Corporation, Japan
 International Finance Corporation (IFC)

ABOUT US

Pakistan Cables is regarded as the pioneer within the cable industry owing to its rich heritage, expertise and commitment to deliver world class products and services to its valued customers both at home and abroad. The company is ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 certified and has had several cables type tested by the world renowned KEMA laboratory in Netherlands. The company also holds the latest award of KEMA Gold type test certificate.



LAN CABLES

Pakistan Cables offers a wide range of high speed and high reliability LAN cables.

CABLE STANDARDS

ISO/IEC 11801, TIA 568C-2, BS EN/IEC 60332-1-2



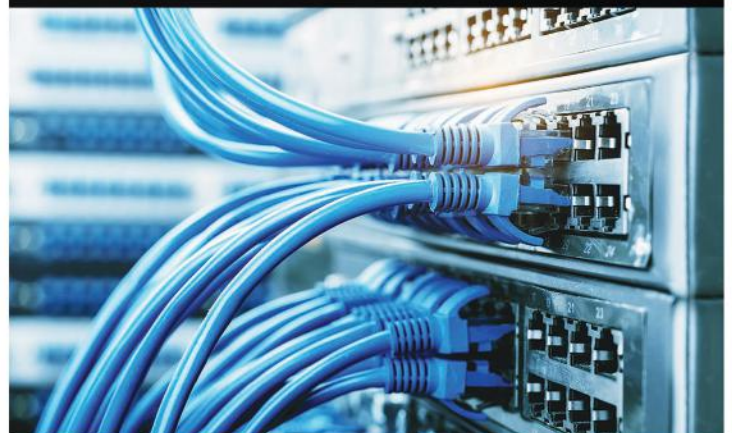
All Structured Cabling supplied by Pakistan Cables is rigorously tested for electrical and dimensional properties. Cable performance in respect of conductor resistance, construction quality, dimensional consistency, and other parameters consistently matches published standards. Conformance to RoHS (Restriction of the use of Construction Hazardous Substances) is determined and confirmed, based on specific requirement.

APPLICATION

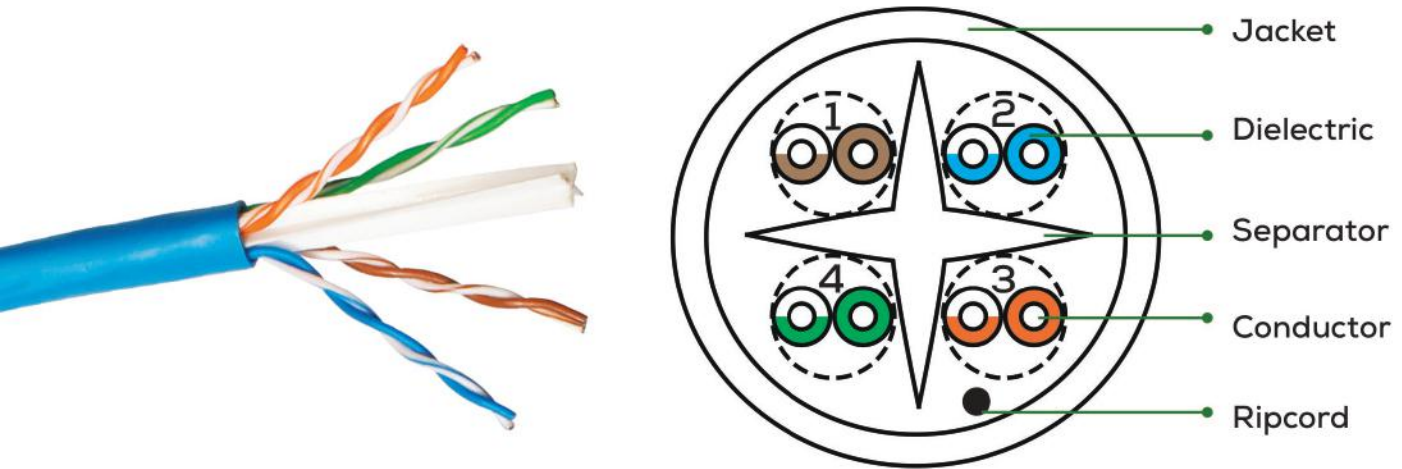
A 4 pair high performance cable that consists of twisted pair conductors, used mainly for data transmission. Category 6 is recommended for all new installations, supports a frequency range of up to 250MHz and is designed for transmission speeds of up to 1 gigabit per second (Gigabit Ethernet).

LSZH VERSION:

For installations where fire, smoke emissions and toxic fumes create a potential risk to life and equipment.



CAT6 U/UTP PVC unshielded twisted pairs



Construction

Conductor

23AWG SOLID BARE COPPER
NOMINAL DIAMETER:
0.0209 INCHES OR 0.53 ± 0.01 MM

Dielectric

HDPE (High Density Polyethylene)
over each of the 4 Pairs
Nominal Diameter over Dielectric:
0.0385 inches or 0.98 ± 0.05 mm

Filler

PE Separator

Ripcord

Nylon

Jacket

PVC (Polyvinyl Chloride)

Available in 2 outer sheath colours:

- BLUE (RAL5015) or GREY (RAL7046)
- Nominal Diameter Over Jacket: 0.240 ± 0.0079 inches or 6.1 ± 0.20 mm
- Nominal Jacket Thickness: 0.0236 inches or 0.60mm

Packaging (weight)

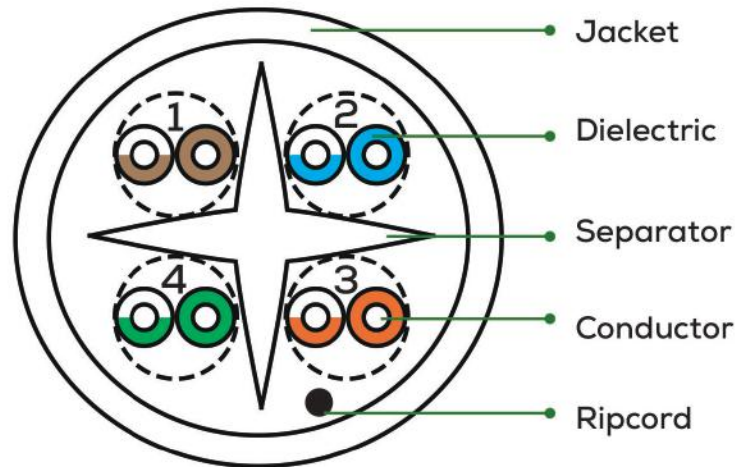
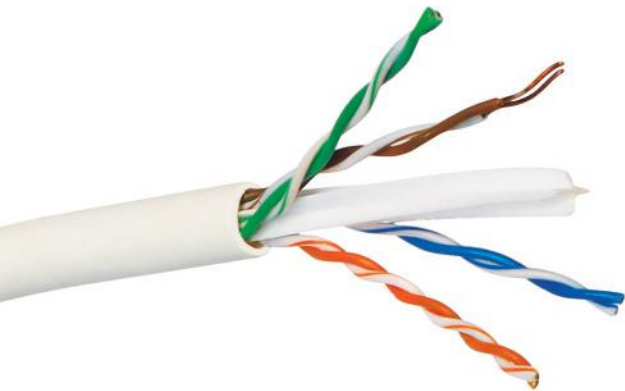
305M Reel pull-box (approx. 13kgs)



Print Legend

PAKISTAN CABLES LIMITED ISO / IEC 11801, ANSI / TIA 568C.2 CAT6 UTP PVC 4PR 23AWG 001M...305M

CAT6 U/UTP LSZH (LOW SMOKE ZERO HALOGEN) Unshielded Twisted Pairs



Construction

Conductor

23AWG Solid Bare Copper
Nominal Diameter: 0.0209 inches or
0.53 ± 0.01mm

Dielectric

HDPE (High Density Polyethylene)
over each of the 4 Pairs
Nominal Diameter over Dielectric:
0.0385 inches or 0.98 ± 0.05mm

Filler

PE Separator

Ripcord

Nylon

Jacket

LSZH (Low Smoke Zero Halogen)
Outer sheath colour: WHITE RAL 9003

- Nominal Diameter Over Jacket: 0.240 ± 0.0079 inches or 6.1±0.20mm
- Nominal Jacket Thickness: 0.0236 inches or 0.60mm

Packaging (weight)

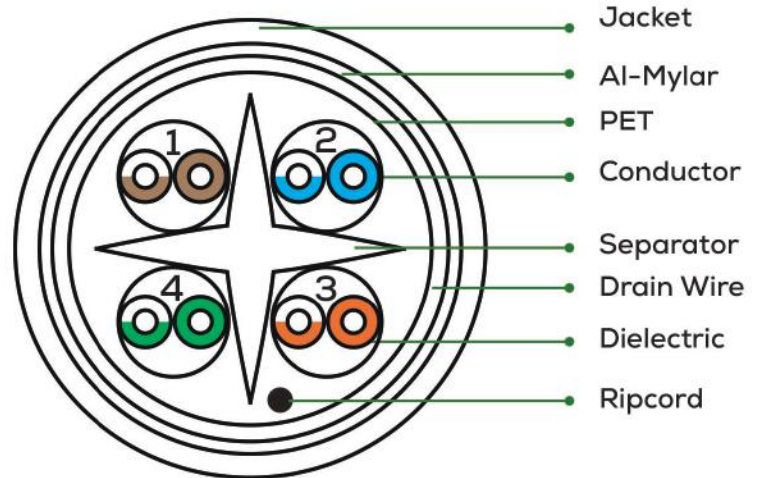
305M Reel pull-box (approx. 14kgs)



Print Legend

PAKISTAN CABLES LIMITED ISO / IEC 11801, ANSI / TIA 568C.2 CAT6 UTP LSZH 4PR 23AWG 001M...305M

CAT6 F/UTP LSZH (LOW SMOKE ZERO HALOGEN) Foiled/Unshielded Twisted Pairs



Construction

Conductor

23AWG Solid Bare Copper
Nominal Diameter: 0.0226 inches
or $0.575 \pm 0.01\text{mm}$

Dielectric

HDPE (High Density Polyethylene)
over each of the 4 Pairs
Nominal Diameter over Dielectric:
 0.0456 inches or $1.16 \pm 0.05\text{mm}$

Filler

PE Separator

Tape

Polyester Tape (PET)

Shield

Aluminum / Polyester Tape

Ripcord

Nylon

Drain Wire

Solid Tinned Copper ($0.40 \pm 0.01\text{mm}$)

Jacket

LSZH (Low Smoke Zero Halogen)
Outer sheath colour: VIOLET (RAL 4005)

- Nominal Diameter Over Jacket:
 0.295 ± 0.0079 inches or $7.5 \pm 0.20\text{mm}$
- Nominal Jacket Thickness:
 0.0275 inches or 0.70mm

Packaging (weight)

305M Wooden / Card Board Reel (approx. 18kgs)



Print Legend

PAKISTAN CABLES LIMITED ISO / IEC 11801, ANSI / TIA 568C.2 CAT6 FTP LSZH 4PR 23AWG SHIELDED 001M...305M

PERFORMANCE CHARACTERISTICS FOR CAT 6 (ATTENUATION & CROSSTALK)

FREQUENCY	RL	ATTEN.	NEXT	ELFEXT	PSNEXT	PSELFEXT	SKW	NVP
MHz	≥dB/100M	≤dB/100M	≥dB/100M	≥dB/100M	≥dB/100M	≥dB/100M	≤ns/100M	
1	20	2.03	79.3	68	77.3	65		
4	23	3.7	65	56	63.3	53		
8	24.5	5.3	60.7	49.9	48.8	46.9		
10	25	5.9	59	48	57.3	45		
16	25	7.5	56	43.9	54.2	40.9		
20	25	8.4	55	42	52.8	39	≤45	66%
25	24.3	9.5	53.3	40	41.3	37		
31.25	23.6	10.6	52	38.1	49.9	35.1		
62.5	21.5	15.4	47	32.1	45.4	29.1		
100	20.1	19.8	44	28	42.3	25		
200	18	29	40	22	37.8	19		
250	17.3	32.8	38.3	20	36.3	17		

CHARACTERISTICS

TEMPERATURE RANGE	MIN. BENDING RADIUS	IMPEDANCE (1 - 100MHZ)	IMPEDANCE (100 - 250MHZ)	MAX CONDUCTOR RESISTANCE AT 20°C	INSULATION RESISTANCE	TESTING VOLTAGE
-10°C to +70°C	5 x OD	100 ± 15% Ω	100 ± 20% Ω	95.0 Ω/km	≥ 5000M Ω * km	Wire / Wire 50Hz 1min = 1.5kV

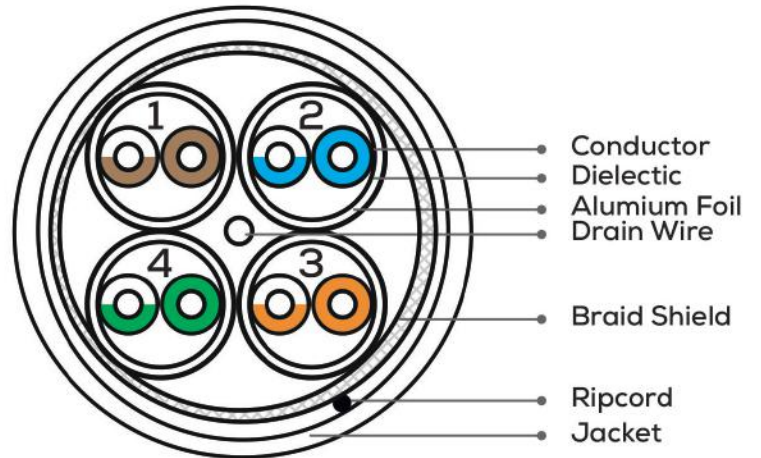
PAIR IDENTIFICATION

- Pair 1:** Brown, White/Brown
- Pair 2:** Blue, White/Blue
- Pair 3:** Orange, White/Orange
- Pair 4:** Green, White/Green



Disclaimer: The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.

CAT 7 S/FTP LSZH (LOW SMOKE ZERO HALOGEN) Shielded Twisted Pairs, Braided



Construction

Conductor

23AWG Solid Bare Copper
Nominal Diameter
0.02255 INCHES OR 0.573 ±0.005MM

Shield

AL Foil Tape on Each Pair

Drain Wire

Solid Tinned Copper (0.40±0.01mm)

Jacket

LSZH (Low Smoke Zero Halogen)
Outer Sheath Colour: ORANGE (RAL 2003)

- Nominal Diameter Over Jacket:
0.307±0.0079 inches or 7.80±0.20mm.
- Nominal Jacket thickness:
0.0236 inches or 0.60mm

Dielectric

Foam Polyethylene (PE)
Over each of the Four Pairs.
Nominal Diameter over Dielectric:
0.0531 inches or 1.35±0.05mm

Braiding

Braided Tinned Copper

Packaging (weight)

305M Wooden / Card Board Reel (approx. 20kgs)



Print Legend

PAKISTAN CABLES LIMITED ISO/IEC 11801, ANSI/TIA 568C.2 IEC-60332 CAT 7 S/FTP LSZH 4PR 23AWG 001M...305M

PERFORMANCE CHARACTERISTICS FOR CAT 7 (ATTENUATION & CROSSTALK)

FREQUENCY	RL	ATTEN.	NEXT	ELFEXT	PSNEXT	PSELFEXT	SKW	NVP
MHz	≥dB/100M	≤dB/100M	≥dB/100M	≥dB/100M	≥dB/100M	≥dB/100M	≤ns/100M	
4	23.01	3.74	78	75	81.36	78.36		
8	24.52	5.24	78	75	75.04	72.04		
10	25	5.86	78	75	73	70		
16	25	7.41	78	75	68.71	65.71		
20	25	8.29	78	75	66.68	63.68		
25	24.32	9.29	78	75	64.64	61.64	≤25	70%
31.25	23.64	10.41	78	75	62.61	59.61		
62.5	21.54	14.88	75.46	72.46	56.29	53.29		
100	20.11	19.02	72.4	69.4	52	49		
150	18.87	23.56	69.76	66.76	48.3	45.3		
200	18	27.47	67.88	64.88	45.68	42.68		
250	17.32	30.97	66.43	63.43	43.64	40.64		
300	16.77	34.19	65.24	62.24	41.98	38.98		
350	16.30	37.19	64.24	61.24	40.57	37.57		
600	14.66	50.1	60.73	57.73	35.66	32.66		

CHARACTERISTICS

TEMPERATURE RANGE	MIN. BENDING RADIUS	IMPEDANCE (4 - 100MHZ)	IMPEDANCE (150 - 600MHZ)	MAX CONDUCTOR RESISTANCE AT 20°C	INSULATION RESISTANCE	TESTING VOLTAGE
-10°C to +70°C	5 x OD	100 ± 15% Ω	100 ± 20% Ω	95.0 Ω/km	≥ 5000M Ω * km	Wire / Wire 50Hz 1min = 1.5kV

PAIR IDENTIFICATION

- Pair 1:** Brown, White/Brown
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Pakistan Cables continues to contribute towards development of the nation's infrastructure. Our commitment to deliver optimum efficiency, energy conservation and world class product quality all come together through the range of structured data cables now available.

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