TECHNICAL DATA SHEET

YOUR AUSTRALIAN CONNECTION

PRODUCT INFO

PRODUCT NAME
CAT6 UTP 4 PAIR BOX (305M)

PRODUCT CODE
AS-GN0002

PRODUCT CATEGORY
CAT6 (CATEGORY 6)

GROVE CAT6 UTP 4 PAIR CABLE

The GROVE 4 Pair UTP Cat6 Cable Box (305Mtr) is a high-quality solid conductor backbone cable tailored for residential and commercial networking requirements. With a length of 305 meters, it offers versatility across various installations. Designed to integrate flawlessly with GROVE Cat6 connectivity components, this cable ensures reliable and robust data transmission.

Combining durability, superior performance, and seamless compatibility, the GROVE 4 Pair UTP Cat6 Cable Box (305Mtr) stands out as the ideal solution for modern networking needs.

APPLICATIONS

Data Centers: Suitable for use in data centers where high-density networking and flexibility are essential.

Office Environments: Ideal for office networks requiring reliable performance and space-saving solutions.

Industrial Settings: Suitable for industrial Ethernet applications where electromagnetic interference may be a concern.

Educational Institutions: Provides reliable connectivity for campus-wide networks, ensuring stable data transmission.

PART NUMBER	COLOUR
AS-GN0002	GREY
AS-GN0008	BLUE
AS-GN0009	GREEN
AS-GN0010	YELLOW
AS-GN0011	ORANGE
AS-GN0013	PURPLE

AUSTRALIAN OWNED #05662 CERTIFIED

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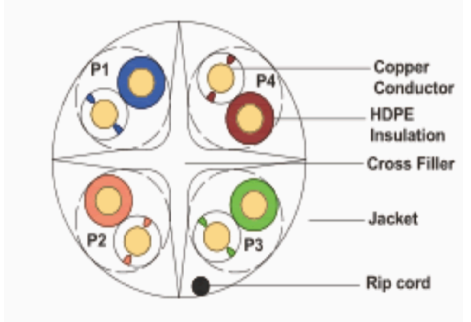

Core:
P1: White / Blue-Blue
P2: White / Orange-Orange
P3: White / Green-Green
P4: White / Brown-Brown

KEY FEATURES PRODUCT

CATEGORY 6 STANDARD

Meets CAT6 (Category 6) specifications for high-speed ethernet networks.

SOLID CONDUCTOR

Provides stability and reliability for long-distance transmissions.

305 METER LENGTH

Offers flexibility and coverage for various networking projects.

COMPATIBILITY

Specifically designed to work flawlessly with GROVE Cat6 connectivity products.

VERSATILITY

Suitable for home networks, small businesses, and large-scale commercial installations.

Colour

TECHNICAL DATA SPECIFICATION

Type		**U/UTP CAT6 4*2*23 AWG PVC**	
Structure		**Structure A**	
Conductors	Structure AWG	AWG	23# (1/23)
	Material	---	Solid Bare Copper
	Diameter	mm	Ø 0.57 +/-0.005
Insulation	Material	---	HDPE
	Diameter	mm	Ø 0.95 +/-0.02
	Average Thickness	mm	0.205 +/-0.05
Twist	Direction	---	S
Shielding 1	Material	---	---
	Conductive Side	---	---
	Overlap Rate	---	---
Layer	Direction	---	S
Fillers	Material	---	PE
	Size	---	Cross Filler
Shielding 2	Material	---	---
	Conductive Side	---	---
	Overlap Rate	---	---
Shielding 3	Shield	mm	---
	Material	mm	---
	Overlap Rate	---	---
Jacket	Material	---	PVC
	Diameter		Ø 6.0 +/-0.2
	Average Thickness		Ø 6.0 +/-0.1
	Colour		GREY
	Marking Colour		BLACK
	Marking		---

CHARACTERISTICS

Mechanical Characteristics	
1. Cable under the minimum tension	≥ 400N
2. Conductor elongation	≥ 15%
3. After Aging	
Tensile Strength	≥ 13.5Mpa
Elongation	≥ 150%
4. Before Aging	
Tensile Strength	≥ 16Mpa
Elongation	≥ 300%

Electrical Characteristics	
1. Impedance	1-250MHz 100±15 (ohms)
2. Rated Temperature	75ºC
3. D-C Resistance Unbalance (%)	Max 2.5
4. D-C Resistance 20ºC	97 (ohms/KM)
5. Pair-to-Ground Capacitance Unbalance	330 (pF/100M)
6. Insulation Resistance	>5000 MΩKM
7. Dielectric Strength	DC 2500V 2S

Nominal Transmission Characteristics

Frequency	RI	ATT	DOP	SWK	NEXT	PSNEXT	ELFEXT	PSELFEXT
(Mhz)	(dB)	(dB/100M)	(ns)	(ns)	(dB)	(dB)	(dB)	(dB)
1	20.0	2.2	570	45	74.3	72.3	67.8	64.8
4	23.0	4.2	552	45	65.2	63.2	55.7	52.7
10	25.0	6.4	545	45	59.3	57.3	47.8	44.8
16	25.0	8.2	543	45	56.2	54.2	43.7	40.7
20	25.0	9.2	542	45	54.7	52.7	41.7	38.7
31.25	23.6	11.5	540	45	51.8	49.8	37.9	34.9
62.5	21.5	16.6	538	5	47.3	45.3	31.8	28.8
100	20.1	21.5	537	45	44.3	52.3	27.8	24.8
200	18.0	30.6	536	45	39.7	37.7	21.7	18.7
250	17.3	34.5	535	45	38.3	36.3	19.8	16.8

Note: The above transmission performance for the 100M, 20 ± 2ºC under the conditions tested

INSTALLATION GUIDELINES

Ensure proper termination and testing using industry-standard tools to maintain signal integrity.

Follow recommended bending radius guidelines during installation to prevent damage to the cable.

Use with compatible GROVE Cat6 connectors and equipment for optimal performance and reliability.