



Product Description	
①	Inner Conductor
②	Insulation
③	Cross Member
④	Ripcord
⑤	Jacket

Application

- * Voice, ISDN
- * 100BASE-T Ethernet (IEEE802.3)
- * 155/622Mbps 1.2/2.4 Gbps ATM
- * 1000Mbps Gigabit Ethernet
- * 550MHz Broadband Video

Standard

- * ISO/IEC11801
- * TIA/EIA-568B
- * UL 444

Construction Item Description		
Conductor	Material	Bare Solid Copper
	Size	23 AWG x 4 Pair
Insulation	Material	HDPE
	Outside Diameter	1.01 ± 0.01 mm
	Average Thickness	0.22 mm
	Color	1. Blue x White / Blue
		2. Orange x White / Orange
3. Green x White / Green		
4. Brown x White / Brown		
Inner Assemble	Lay & Direction	S=90 ± 5 mm
Filler	Material	Ripcord
	Construction	300D
Jacket	Material	PVC, 60P, -20~75°C
	Hardness	81 ±3
	Outside Diameter	6.0 ± 0.15
	Average Thickness	0.55 ~ 0.60
	Color	Grey / Blue
	Marking Color	Black

Electrical Property	
Conductor Resistance at 20°C	Max. 9.38 Ω / 100m
Resistance unbalance within a pair	Max. 5%
Mutual Capacitance	Max. 5600 pF / 100m
Pair-to-Ground Capacitance Unbalance	Max. 330 pF/100m
Characteristic impedance at 100MHz	100 ±15 Ω
Propagation Delay	Max. 45ns / 100m

Mechanical Properties	
INSULATION	
Min. Tension Strength Before Aging	1.683 Kgf/ mm ²
Min. Tension Strength After Aging	75% before aging (100°C X 48hrs)
Min. Elongation (%) Before Aging	300%
Min. Elongation (%) After Aging	75% before aging (100°C X 48hrs)
JACKET	
Min. Tension Strength Before Aging	1.407 Kgf/ mm ²
Min. Tension Strength After Aging	75% before aging (100°C X 168hrs)
Min. Elongation (%) Before Aging	Min. 100%
Min. Elongation (%) After Aging	50% before aging (100°C X 168hrs)
Installation Temperature	0°C to 50°C
Operating Temperature	-20°C to +75°C

Transmission Properties									
No.	Frequency	Attenuation (Max)	Propagation Delay (MAX)	Propagation Delay Skew (MAX)	Return Loss (Min)	NEXT (Min)	PS NEXT (Min)	EL-FEXT (Min)	PS EL-FEXT (Min)
	MHz	dB/100m	ns/100m	ns/100m	dB (on 100m)	dB (on 100m)	dB (on 100m)	dB (on 100m)	dB (on 100m)
1	4	3.78	552	45	23.01	66.27	63.27	55.96	52.96
2	8	5.32	546.73	45	24.52	61.75	58.75	49.94	46.94
3	10	5.95	545.38	45	25	60.3	57.3	48	45
4	16	7.55	543	45	25	57.24	54.24	43.92	40.92
5	20	8.47	542.05	45	25	55.78	52.78	41.98	38.98
6	25	9.51	541.2	45	24.32	54.33	51.33	40.04	37.04
7	31.25	10.67	540.44	45	23.64	52.88	49.88	38.1	35.1
8	50	13.66	539.09	45	22.21	49.82	46.82	34.02	31.02
9	62.5	15.38	538.55	45	21.54	48.36	45.36	32.08	29.08
10	100	19.8	537.6	45	20.11	45.3	42.3	28	25
11	125	22.36	537.22	45	19.43	43.85	40.85	26.06	23.06
12	200	28.98	536.55	45	18	40.78	37.78	21.98	18.98
13	250	32.85	536.28	45	17.32	39.33	36.33	20.04	17.04

Part number	Description
630-1102-2GR	APTEK Cat6 U/UTP Unshielded Cable, 4 Pair, 23AWG, PVC Grey, 305m/roll
630-1102-2BU	APTEK Cat6 U/UTP Unshielded Cable, 4 Pair, 23AWG, PVC Blue, 305m/roll