

HyperPlus 5e Plenum

Berk-Tek's HYPER PLUS 5e Standard Category 5e UTP Cables are designed for horizontal network and voice applications in a structured cabling network to connect between the user outlet and horizontal cross-connect.

Description

Construction

24 AWG bare copper wire insulated with thermoplastic. Two insulated conductors twisted together to form a pair and four such pairs cabled to form the basic unit, jacketed with flame-retardant PVC.

Standards

- North American: ANSI/TIA/EIA-568-B.2 Category 5e, UL 444 and C22.2 No.214-02
- International: ISO/IEC 11801 2nd Edition Category 5. EU Directive 2002/95/EC (RoHS)

Flame Rating

- Plenum - NFPA 262, CMP
- UL Listed

Applications

Berk-Tek's Hyper Plus 5e Standard Category 5e UTP cable is intended for high speed data applications up to 100 MHz including:

IEEE 802.3	1000BASE-T	1 GB/s
ATM	155 Mb/s	155 Mb/s
IEEE 802.3	100BASE-TX	100 MB/s
CDDI	n/a	100 Mb/s
IEEE 802.3	10BASE-T	10 Mb/s

Features

- Supports most data and voice applications
- ETL Verified to TIA/EIA-568-B.2 Category 5e

Benefits

- Universally accepted design for global commercial network installations
- Simplified structured cabling solution preserving long-term network investment
- Characterized to 350 Mhz, 250 Mhz greater than the standard

Standards

National TIA/EIA-568-B.2

HyperPlus 5e Plenum

Characteristics

Construction characteristics	
Type of cable	UTP
Dimensional characteristics	
Length per reel	1000.0 ft
Number of pairs	4
Usage characteristics	
Field of application	Indoor
Category	Cat. 5e
Fire safety	Plenum Rated

Technical Data - Physical

Technical Data - Physical			Color Code		
			Pair-1	White/Blue	Blue
Conductor	24 AWG Bare Copper		Pair-2	White/Orange	Orange
Conductor diameter—in. (mm)	0.02	(0.52)	Pair-3	White/Green	Green
Insulated Conductor Diameter- in. (mm)	0.036	(0.91)	Pair-4	White/Brown	Brown
Cable diameter—in. (mm)	0.202	(5.13)			
Nominal cable weight—lb./kft. (kg/km)	22	(32.73)	Temperature Rating		
Max. installation tension—lb. (N)	25	(110)	Installation	0°C to +50°C	
Min. bend radius—in. (mm)	1	(25.4)	Operation	-20°C to +60°C	

Technical Data - Parametric Measurements

Mutual Capacitance	5.6 nF/100 m max.
DC resistance	9.38 Ohms/100 m max.
Skew	45 ns/100 m max.
Pair to ground Unbalance	330 pF/100 m max.
Velocity of Propagation	72% nom.
Input Impedance	100 ± 15% 1-100 MHz
DC Resistance Unbalance:	5% max.

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Technical Data - Electrical Characteristics

FREQ MHz	SRL (dB)		RL (dB)		INSERTION LOSS (dB/100m)		PS-NEXT (dB)		NEXT (dB)	
	min.	typical	min.	typical	max.	typical	min.	typical	min.	typical
1	25.0	36.9	20.0	39.0	2.0	1.7	62.3	77.0	66.3	84.0
4	25.0	42.2	23.0	37.6	4.1	3.5	53.3	68.3	57.3	84.5
10	25.0	39.1	25.0	38.0	6.5	5.6	47.3	65.0	51.3	72.4
16	25.0	38.6	25.0	37.0	8.2	7.2	44.3	58.6	48.3	77.5
20	24.3	47.0	25.0	46.4	9.3	8.1	42.8	57.3	46.8	71.8
31.25	23.6	34.6	23.6	34.5	11.7	10.1	39.9	53.5	43.9	67.9
62.5	21.5	33.7	21.5	33.0	17.0	14.6	35.4	53.2	39.4	63.6
100	20.1	36.4	20.1	37.3	22.0	18.7	32.3	45.8	36.3	57.5
250	17.3	31.6	17.3	30.9	36.9	30.7	26.3	45.1	30.3	54.8
350	16.3	34.2	16.3	33.2	44.9	36.9	24.2	36.7	28.2	49.3

Technical Data - Electrical Characteristics

FREQ Mhz	ACR (dB@100m)		PS-ACR (dB@100m)		ELFEXT (dB)		PS-ELFEXT (dB)	
	min.	typical	min.	typical	min.	typical	min.	typical
1	64.3	77.5	60.3	75.1	63.8	88.8	60.8	79.4
4	53.2	66.6	49.2	64.4	51.7	78.9	48.7	68.7
10	44.8	60.9	40.8	58.7	43.8	68.0	40.8	60.0
16	40	52.8	36.0	50.6	39.7	60.5	36.7	50.9
20	37.5	49.6	33.5	48.3	37.7	58.2	34.7	54.6
31.25	32.2	44.0	28.2	42.3	33.9	53.9	30.9	47.1
62.5	22.4	38.9	18.4	37.0	27.8	47.7	24.8	42.4
100	14.3	27.6	10.3	25.1	23.8	43.3	20.8	38.1
250	—	12.5	—	11.2	15.8	33.6	12.8	24.8
350	—	-2.3	—	-4	12.9	28.0	9.9	19.5

Frequencies above 250 MHz are for engineering information.

Product List

☎=Make to order, 📦=Make to stock

Part Number	Description	Colour	Packaging
📦 10032223	HyperPlus 5e Plenum	White	Box
📦 10032221	HyperPlus 5e Plenum	White	Reel in a box
📦 10032222	HyperPlus 5e Plenum	White	Reel
📦 10033521	HyperPlus 5e Plenum	Black	Box
📦 10033807	HyperPlus 5e Plenum	Black	Reel
📦 10032229	HyperPlus 5e Plenum	Red	Box
📦 10032228	HyperPlus 5e Plenum	Red	Reel
📦 10060673	HyperPlus 5e Plenum	Red	Reel in a box

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Contact

Copper LAN Product Inquiry
Phone: 717-354-6200
berktek.support@nexans.com

HyperPlus 5e Plenum

Part Number	Description	Colour	Packaging
📦 10032232	HyperPlus 5e Plenum	Green	Box
📦 10032231	HyperPlus 5e Plenum	Green	Reel
📦 10032230	HyperPlus 5e Plenum	Green	Reel in a box
📦 10033814	HyperPlus 5e Plenum	Pink	Box
📦 10034145	HyperPlus 5e Plenum	Pink	Reel
📦 10032224	HyperPlus 5e Plenum	Pink	Reel in a box
📦 10063926	HyperPlus 5e Plenum	Brown	Box
📦 10032235	HyperPlus 5e Plenum	Yellow	Box
📦 10032234	HyperPlus 5e Plenum	Yellow	Reel
📦 10032233	HyperPlus 5e Plenum	Yellow	Reel in a box
📦 10032227	HyperPlus 5e Plenum	Blue	Box
📦 10032226	HyperPlus 5e Plenum	Blue	Reel
📦 10032225	HyperPlus 5e Plenum	Blue	Reel in a box
📦 10034885	HyperPlus 5e Plenum	Violet	Box
📦 10035124	HyperPlus 5e Plenum	Violet	Reel
📦 10032236	HyperPlus 5e Plenum	Orange	Box
📦 10033516	HyperPlus 5e Plenum	Orange	Reel
📦 10035018	HyperPlus 5e Plenum	Orange	Reel in a box
📦 10032206	HyperPlus 5e Plenum	Grey	Reel
📦 10032207	HyperPlus 5e Plenum	Grey	Box
📦 10032205	HyperPlus 5e Plenum	Grey	Reel in a box

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Selling delivery information

PLEASE NOTE: In the interest of product improvement, Berk-Tek, a Nexans company may make improvements or changes in the products, the programs or services described at any time without notice. Additionally, the information contained herein may include typographical errors or technical inaccuracies. Changes will be periodically made to address any such issues.