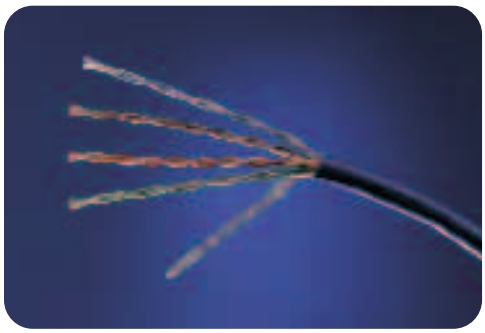
TrueNet®

Category 6 Four-Pair Plenum Cable



ADC's TrueNet® Category 6 plenum cable, with best in class performance, features AirES® technology. It saves as much as 32% of the available space in cable runs and is a key component of the TrueNet structured cabling system. The smaller diameter also saves space in the communications closet, reduces the amount of cable management accessories required and lowers the risk associated with fire and smoke in the plenum space.

Features:

- Patented AirES technology
- Manufactured with lead-free materials
- Patented impedance matching for zero bit-errors
- Easier and faster installation
- Component of the TrueNet zero bit-error warranty
- Available in a side-by-side configuration

Compliances:

- UL Subject 444
- (UL)-C(UL) Type CMP
- ICEA S-90-661
- NEC 800 Type CMP
- ISO/IEC 11801 Class E
- ETL Verified TIA/EIA-568-B.2-1 Category 6 horizontal cable requirements

SPEC SHEET

TrueNet®
Category 6 Four-Pair Plenum Cable

Specifications

CONSTRUCTION

Features AirES technology

Conductors:	23 AWG solid bare copper
Insulation:	100% FEP
Pairing:	Short, staggered pair lays
Filler:	Fluoropolymer
Jacket:	Lead-free, flame retardant PVC
Nominal outer diameter	5.28 mm (.208")

ELECTRICAL CHARACTERISTICS

Conductor DC resistance (maximum):	9.38 Ω/100 meters (28.6 Ω /1000 feet) @ 20 °C (68 °F)
DC resistance unbalance (maximum):	2%
Mutual capacitance (maximum):	5.6 nF/100 meters (17 pF/ft)
Operating temperature (maximum):	75 °C (167 °F)
Operating voltage (maximum):	300 VDC
Worst case cable skew:	25 nS/100 meters (25 nS/328 ft)
Nominal velocity of propagation:	73%

6/05 • 132465 5

TrueNet®
Category 6 Four-Pair Plenum Cable

FREQ (MHz)	FITTED IMPEDANCE (Ohms)	INSERTION LOSS (dB/100m)		RETURN LOSS (dB/100m)		Pair-Pair NEXT (dB/100m)		PSNEXT (dB/100m)	
	SPEC	Max	TIA Spec	Min	TIA Spec	Min	TIA Spec	Min	TIA Spec
1	100 +/- 5	1.7	2.0	28.5	20.0	83.8	74.3	81.9	72.3
4	100 +/- 3	3.4	3.8	32.1	22.9	74.9	65.3	74.3	63.3
8	100 +/- 3	4.9	5.3	35.0	24.5	74.4	60.8	71.0	58.8
10	100 +/- 3	5.5	6.0	34.6	25.0	70.3	59.3	68.0	57.3
16	100 +/- 3	7.0	7.6	31.7	25.0	67.2	56.2	66.7	54.2
20	100 +/- 3	7.9	8.5	32.1	25.0	66.8	54.8	64.7	52.8
25	100 +/- 3	8.9	9.5	36.5	24.3	65.6	53.3	63.6	51.3
31.25	100 +/- 3	9.9	10.7	36.7	23.6	61.8	51.9	60.9	49.9
62.5	100 +/- 3	14.3	15.4	34.0	21.5	61.0	47.4	59.3	45.4
100	100 +/- 3	18.4	19.8	30.8	20.1	60.2	44.3	57.4	42.3
155	100 +/- 3	23.3	25.2	27.3	18.8	54.8	41.4	51.4	39.4
200	100 +/- 3	26.8	29.0	31.0	18.0	54.9	39.8	52.4	37.8
250	100 +/- 3	30.4	32.8	28.6	17.3	49.5	38.3	48.5	36.3
300	100 +/- 3	33.7		27.2		49.0		48.2	
350	100 +/- 3	36.7		24.3		46.3		44.8	
400	100 +/- 3	39.6		25.0		47.5		45.2	
450	100 +/- 3	42.5		24.5		47.3		43.4	
500	100 +/- 3	45.3		24.2		43.8		43.0	
550	100 +/- 3	47.7		18.6		40.2		39.4	

FREQ (MHz)	Pair-Pair ACR (dB/100m)		PSACR (dB/100m)		Pair-Pair ELFEXT (dB/100m)		PSELFEXT (dB/100m)		LCL (dB/100m)
	Min	TIA Spec	Min	TIA Spec	Min	TIA Spec	Min	TIA Spec	Min
1	86.8	72.3	84.2	70.3	73.6	67.8	72.6	64.8	40.0
4	71.7	61.5	71.2	59.5	62.7	55.8	61.8	52.8	40.0
8	69.8	55.4	66.4	53.4	57.2	49.7	56.2	46.7	40.0
10	65.1	53.3	62.8	51.3	55.2	47.8	54.2	44.8	40.0
16	64.8	48.7	61.5	46.7	51.1	43.7	49.8	40.7	38.0
20	59.4	46.3	57.4	44.3	49.3	41.8	48.2	38.8	37.0
25	60.2	43.8	57.7	41.8	47.4	39.8	46.5	36.8	36.0
31.25	52.5	41.2	51.3	39.2	45.5	37.9	44.4	34.9	35.1
62.5	49.3	32.0	47.9	30.0	40.1	31.9	39.4	28.9	32.0
100	42.7	24.5	41.6	22.5	36.8	27.8	35.9	24.8	30.0
155	33.2	16.3	29.9	14.3	33.6	24.0	33.2	21.0	28.1
200	30.3	10.8	26.9	8.8	31.7	21.8	30.6	18.8	27.0
250	26.7	5.5	22.2	3.5	29.1	19.8	28.9	16.8	26.0
300	19.4		16.6		26.2		25.5		
350	16.8		14.7		21.3		21.8		
400	12.0		10.2		22.1		22.5		
450	10.4		8.4		28.3		27.3		
500	8.8		4.8		23.6		24.0		
550	1.7		0.7		25.7		24.7		

NOTE: The above listed discrete frequency electrical performance values are provided for engineering information only. Actual compliance testing is based on swept frequency measurements. The spec values are based on TIA/EIA 568-B.2-1 specifications.

Ordering Information

Description	Weight (Lbs/kft)	Catalog Number*
4-pair cable		
Reel packaging	30	TN6SP-*XXYY*
Reel in a box–1000'	32	TN6SP-*XX*RB

*To order cable sheath color, replace *XX* with:

BL = Blue
WT = White
GY = Gray
GN = Green
YL = Yellow
RD = Red

*To designate reel length, replace *YY* with:

02 = 1000'
04 = 2000'
05 = 2500'
06 = 3000'

SPEC SHEET

Web Site: www.adc.com
From North America, Call Toll Free: 1-800-366-3891 • Outside of North America: +1-952-938-8080
Fax: +1-952-917-3237 • For a listing of ADC's global sales office locations, please refer to our web site.

ADC Telecommunications, Inc., P.O. Box 1101, Minneapolis, Minnesota USA 55440-1101