

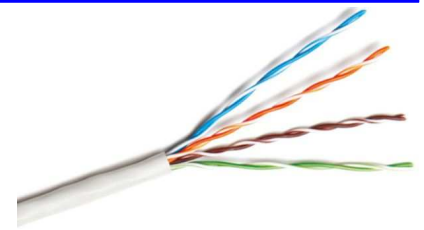
AT&T CopperLine Technical Specification

Cable Type: 4x2x24# U/UTP Slim Category 6

100 Ohm Indoor Horizontal Cable - PVC

AT&T P/N: 11U06VA004S-GY

Revision: 2 Date: 13 February 2015



Category 6 U/UTP indoor cable, conforming to TIA-568-C.2, IEC 61156-5 and EN 50288. The cable contains 4 twisted pairs cabled together and overall jacketed with a gray PVC compound for indoor use. The cable conforms to EU Directive 2011/65/EU (RoHS-II), to IEC 60332-1 and it supports IEEE 802.3at (PoE+) and Class E permanent links & channels as specified in ISO/IEC 11801 and EN 50173.

Physical Description

Basic conductor	Solid 24AWG, bare annealed copper.
Insulation	Polyolefin.
Insulated conductors	8
Twisted pairs	4
Color code	Blue x White/Blue, Orange x White/Orange, Green x White/Green, Brown x White/Brown.
Center element	None.
Tape warp	None.
Outer jacket	PVC compound for indoor use.
Color	Light Gray RAL 9002.
Outer jacket thickness	0.45 mm nom.
Outer diameter	5.2±0.2 mm
Surface Marking	AT&T CopperLine 4P 24AWG CAT6 U/UTP SLIM PVC IEC 60332-1 TIA-568-C.2 IEC 61156-5 EN 50288 CE 2011/65/EU (RoHS) [Batch Number] [Meter Mark] METER --- P/N 11U06VA004S ---

Mechanical Properties

Bend Radius	Permanent: 4xD min. During installation: 8xD min.
Operating temperature range	-20 to +60C
Storage temperature range	-40 to +70C
Installation temperature range	0 to +50C
Pulling force	80 N max.
Flame test	IEC 60332-1.
Total Weight	33 Kg/Km nom.

Electrical Properties

Characteristic Impedance	100±6 Ohm @ 1-100 MHz
DC Resistance	90 Ohm/Km max.
Resistance unbalance	2% max.
Capacitance	45 pF/m nom. @ 1 KHz
Cap. Unbalance (wire to ground)	1500 pF/Km max. @ 1 KHz.
Voltage rating	75 Vdc max
Dielectric strength	1500 Volts/1 minute min rms
Velocity of Propagation (NVP)	69%
Propagation delay	514 + 36/f ^{1/2} nS/100m max @ 1-300 MHz
Propagation delay Skew	40 nS/100m max.
Insulation Resistance	500 MegaOhm•Km min. @ 500 Vdc
Coupling attenuation	IEC 61156-5 TYPE III
Transfer Impedance	N/A

Transmission Properties - Category 6 ANSI/TIA-568-C.2 Horizontal Cable Limits

FREQ.	Insertion Loss			NEXT			PS NEXT			ACR-F			PS ACR-F			RL			TCL	EL-TCTL
MHz	dB/100m			dB			dB			dB/100m			dB/100m			dB			dB	dB
	Max	Nom	Std	Min	Nom	Std	Min	Nom	Std	Min	Nom	Std	Min	Nom	Std	Min	Nom	Std	Min	Min
1.00	2.0	1.65	2.0	77.3	80	74.3	75.3	77	72.3	70.8	80	67.8	68.8	77	64.8	20.0	25	20.0	40	35
10.00	5.9	5.6	6.0	23.3	65	59.3	60.3	62	57.3	50.8	65	47.8	48.8	62	44.8	26.0	30	25.0	40	15
25.00	9.4	9.0	9.5	56.3	58	53.3	54.3	55	51.3	42.8	57	39.8	40.8	54	36.8	24.3	30	24.3	36	7.0
31.25	10.6	10.2	10.7	54.9	57	51.9	52.9	54	49.9	40.9	53	37.9	38.9	50	34.9	23.6	28	23.6	35.1	5.5
62.50	15.2	14.9	15.4	50.4	53	47.4	48.4	50	45.4	34.9	45	31.9	32.9	43	28.9	21.5	27	21.5	32	NS
100.00	19.6	19.2	19.8	47.3	50	44.3	45.3	47	42.3	30.8	43	27.8	28.8	40	24.8	20.1	26	20.1	30	NS
200.00	28.7	27.5	29.0	42.8	45	39.8	40.8	42	37.8	24.8	40	21.8	22.8	37	18.8	18.0	25	18.0	27	NS
250.00	32.6	31.0	32.8	41.3	44	38.3	39.3	41	36.3	22.8	37	19.8	20.8	34	16.8	17.3	25	17.3	26	NS