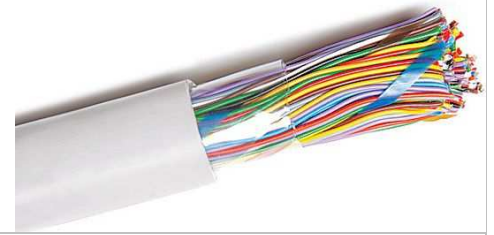


AT&T CopperLine Technical Specification
Cable Type: 12 Pair 24AWG U/UTP Category 3
100 Ohm Indoor Backbone Cable - LSOH Jacket
AT&T P/N: 11U03HA012N-GY
Revision: 2 Date: 11 May 2017



12 Pair Category 3 U/UTP backbone indoor cable, conforming to TIA-568-C.2 and IEC 61156-4. The cable contains 12 twisted pairs cabled together. The core is wrapped with polyester tape and overall jacketed with LSOH compound for indoor use. The cable conforms to EU Directive 2011/65/EU (RoHS-II) and to IEC 60332-1 flame test.

Physical Description

Basic conductor	Solid 24AWG (UL444) bare annealed copper.
Insulation	Polyolefin.
Insulated conductors	24
Twisted pairs	12
Color code	Below.
Core formation	12 pairs cabled together.
Water blocking	None.
Tape wrap	Polyester tape.
Rip cord	PA rope laid in parallel for easy jacket removal.
Outer jacket	Low-smoke, Zero-halogen, Flame-retardant compound for indoor use.
Outer jacket thickness	1.2 mm nom.
Color	Grey RAL 9002.
Outer diameter	8.1 mm nom.
Surface Marking (black)	AT&T CopperLine 12P 24AWG CAT3 U/UTP INDOOR LSOH IEC 60332-1 TIA-568-C.2 CE 2011/65/EU (RoHS) [Batch Number] [Meter Mark] METER --- P/N 11U03HA012N-GY ---

Mechanical Properties

Bend Radius	Permanent: 15xD min. During installation: 30xD min.
Operating temperature range	-20 to +60C
Storage temperature range	-10 to +60C
Installation temperature range	0 to +50C
Flame Tests	IEC 60332-1 (Flame propagation), IEC 60754 (Smoke acidity) & IEC 61034 (Smoke opacity).
Pulling force	120 N max.
Total Weight	80 kg/km nom.

Electrical Properties

Characteristic Impedance	100±15 Ohm @ 1-16 MHz
DC Resistance	93.8 Ohm/km max.
Resistance unbalance	5% max.
Capacitance	66 pF/m max. @ 1 kHz
Cap. Unbalance (pair to ground)	3300 pF/km max. @ 1 kHz.
Voltage rating	75V max
Dielectric strength	1500 Volts/1 minute min rms
Velocity of Propagation (NVP)	67-69%
Insulation Resistance	5000 MegaOhm*km min. @ 500 Vdc

Transmission Properties - Category 3 ANSI/TIA-568-C.2 Backbone Cable Limits

FREQ. MHz	Insertion Loss dB/100m Max	NEXT dB Min	PS NEXT dB Min	SRL dB Min	Prop. Delay nS/100m Max
0.772	2.2	43.0	43.0	12.0	575.0
1.00	2.6	41.0	41.0	12.0	570.0
4.00	5.6	32.3	32.3	12.0	552.0
8.00	8.5	27.8	27.8	12.0	546.7
10.00	9.7	26.3	26.3	12.0	545.4
16.00	13.1	23.3	23.3	10.0	543.0

Color Code

Pair	Tip	Ring
1	Blue	White
2	Orange	
3	Green	
4	Brown	
5	Grey	
6	Blue	Red
7	Orange	
8	Green	
9	Brown	
10	Grey	
11	Blue	Black
12	Orange	