

## The Lynx Ultra™ Television Distributed on Cat 6 Cable



The Lynx Ultra is designed to deliver television (RF) on Cat 5/6 cable. It can distribute up to 804 digital channels or 268 HD channels over 100 meters of Cat 5 or Cat 6 cable. High frequency RF baluns in both the hub and end converters convert RF signals from a 75 ohm coaxial input signal to a 100 ohm UTP signal, and back again when the signal reaches the point of use. The product has bi-directional capabilities, and can be used in CATV, MATV, and SMATV applications.

Frequency capabilities Forward frequencies: 55 MHz to 860 MHz

Reverse path frequencies: 5 MHz to 42 MHz DOCSIS / FSK/ T Channel video return capable

RF capabilities Digital: HD, 4K, 8K, 4K with HDR (high dynamic range), 8K, and SD

Analog: NTSC and PAL

Electrical specifications Insertion loss of 14 dB @ 550 MHz

Insertion loss of 15dB @860 MHz

Input impedance: 75 ohms
Output impedance: 100 ohms
Return loss: -15 dB @ 550 MHz

## Performance characteristics

Distance capabilities with amplified converter (assumes 48 dB to hub and Cat 6 cable)	Meters	Feet	Frequency	Digital ch. (1 MHz)	HD channels (3 MHz)	Analog ch. (6 MHz)
	100	328	860 MHz	804	268	134
Distance capabilities with passive converter (assumes 48 dB to hub and Cat 6 cable)	70	230	860 MHz	804	268	134
	76	240	750 MHz	702	234	117
	81	265	550 MHz	468	156	78

An interactive Lynx Ultra design model is available upon request.

Agency standards FCC CFR Part 15 Class A, EM55022, CISPR 22

Physical characteristics Connectors: F connector and RJ-45 jack

Dimensions of rackmounted hub: 19" x 3.25" x 1.75"

Dimensions of Ultra converters: 3" x 2.62"

Weight of 24 port hub (HD24): 3 lbs. 15 oz. Weight of 16 port hub (HD16): 3 lbs. 2 oz. Weight of 8 port hub (HD8): 2 lbs. 5 oz. Weight of passive end converter: 2.5 oz. Weight of amplified end converter: 3.5 oz.

Port density of hubs: 8, 16, or 24 ports per hub

UTP cable compatibility: Cat 5E, Cat 5e, Cat 6, Cat 6A, Cat 7

UTP pin usage: Pins 7 and 8 are active Cabling method: ANSI/TIA 568 A or B

Environmental Operating temperature: 32° F to 131° F (0° C to 55° C)

Relative humidity: < 85% non-condensing

Storage temperature: -40°F to 185°F (-40°C to 85° C)

Warranty 1 year warranty on parts

Part numbers 24 port Ultra Hub – HD24 L40-0271

16 port Ultra Hub – HD16 L40-0270 8 port Ultra Hub – HD8 L40-0269 8 port Ultra Hub without rackmount L40-0260

Passive Ultra Converter – UC L40-0257 Amplified Ultra Converter – AUC L40-0258

Wallmount bracket for hubs 180-0529
Wallmount bracket for UC and AUC 809-1845

