

# LT-LLC400-150LSZH

## PLLC-400, 50 Ohm Braided Coaxial Cable

The LT-LLC400-150LSZH is a premium-grade, low-loss 50 Ohm coaxial cable designed to provide superior RF and microwave signal transmission. It uses a copper-clad aluminum inner conductor combined with a physical foam polyethylene dielectric, achieving low attenuation and consistent impedance across a wide frequency range. A bonded aluminum/polyester/aluminum tape shield with tinned copper wire braiding offers 80% coverage, ensuring excellent protection against electromagnetic interference (EMI). The outer jacket is made from LSZH (Low Smoke Zero Halogen) material, providing fire safety and reducing smoke and halogen emissions—ideal for indoor and outdoor installations where safety is a priority.

### Key Features

- 50  $\Omega$  impedance with stable electrical performance.
- Low attenuation and minimal signal loss across wide frequency ranges.
- High shielding effectiveness ( $\geq 90$  dB) for strong EMI protection.
- Peak power handling capability up to 18.89 kW.
- High insulation resistance ( $>5000$  m $\Omega$ ·km) for signal stability.
- Robust mechanical design for durability and easy installation.

### Applications

- Wireless communication base stations and feeder lines.
- Broadband and data distribution networks.
- Public safety and transportation communication systems.
- Industrial RF and telecommunication infrastructure.

### Performance Overview

Frequency (MHz)	Attenuation (dB / 100 m)	Frequency (MHz)	Attenuation (dB / 100 m)
30	2.2	1500	16.8
50	2.9	1800	18.6
100	4.1	1900	19.2
150	5.0	2000	19.6
220	6.1	2200	20.9
450	8.9	2500	22.2
900	12.8	2800	23.9
1200	15.0	3000	24.8



### Specifications

Electrical Specifications	
Capacitance	77 pF/m
Impedance	$50 \pm 2 \Omega$
Velocity	85.0%
Insulation Resistance	$>5000$ m $\Omega$ • km
Cut-off Frequency	16.2 kV
Withstanding Voltage (AC)	2.5 kV
Sparkover Voltage	8.0 kW
Peak Power Rating	18.89 kW
Screen Efficiency	$\geq 90$ Db
VSWR	
800 ~ 1000 MHz	$\leq 1.15$
1700 ~ 2000 MHz	$\leq 1.20$
2000 ~ 2400 MHz	$\leq 1.25$
Construction Materials	
Inner Conductor	Copper-clad Aluminum
Dielectric	Physical Foam Polyethylene
Outer Conductor	Bonded Aluminum/ Polyester/ Aluminum Tape + TC Wire Braiding
Outer Conductor Coverage	80%
Jacket	LSZH

