



L3HARRIS™
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CNI22 SERIES SWEPT BLADE ANTENNA

The CNI22 Series ultra-high frequency (UHF)/L-band antennas are state-of-the-art in combined function blades for high-performance aircraft. A common radiation aperture for UHF communications and L-band functions, combined with internal diplexers, allows for independent operation with up to 70-decibels isolation between bands.

The true innovation is the use of a one-piece metal casting for the base and antenna leading edge. This greatly increases side load strength, erosion resistance and service life. Life-cycle operating costs are reduced. Severe vibration and buffeting environments are accommodated by this design, which is capable of high-acceleration resonance dwell. An additional benefit of the swept-back leading edge is radar signature reduction when compared to previous vertical blade antennas. Several mounting footprint options are available for aircraft including the B-1B, F-15, F-16 and F-111.

ELECTRICAL	CNI22-1	CNI22-4, -5	CNI22-9-1	CNI22-14-1	CNI22-15-1	CNI22-16
Frequency range	225–400 960–1220					
VSWR	225–360 2.0:1 360–400 2.5:1 960–1220 2.0:1 1000–1100 1.8:1	225–400 2.25:1 960–1220 2.0:1 1000–1220 2.0:1	225–400 2.5:1 960–1220 2.0:1 1000–1100 1.8:1	225–400 2.5:1 960–1220 2.0:1 1000–1100 1.8:1	225–400 2.5:1 960–1220 2.0:1 1000–1100 1.8:1	225–400 2.5:1 960–1220 2.0:1 1000–1100 1.8:1
Impedance	50 Ω					
Polarization	Vertical					
Isolation						
UHF to L-band	>50 dB					
L-band to UHF	>50 dB					
Radiation patterns	Type of monopole					
Power handling						
UHF L-band	100 W CW 2 W avg 2.5 kW peak	100 W CW 2 W avg 4.0 kW peak	100 W CW 2 W avg 4.0 kW peak	100 W CW 2 W avg 2.5 kW peak	100 W CW 2 W avg 4.0 kW peak	100 W CW 2 W avg 4.0 kW peak
MECHANICAL						
Connectors						
UHF L-band	TNC female TNC male	N female N male	TNC female SC female	TNC female TNC male	TNC female N female	TNC female N female
Weight	2.2 lbs max	2.5 lbs max	2.0 lbs max	1.75 lbs max	2.2 lbs max	2.2 lbs max



KEY FEATURES

- > Rugged, swept-back UHF/ L-band blade
- > Qualified for high-performance aircraft
- > Low radar cross section (RCS)
- > Erosion-resistant housing with metal leading edge

For further details and specifications, contact the factory at antenna.info@L3Harris.com

CNI22 Series Swept Blade Antenna

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Nonexport-controlled Information

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



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