

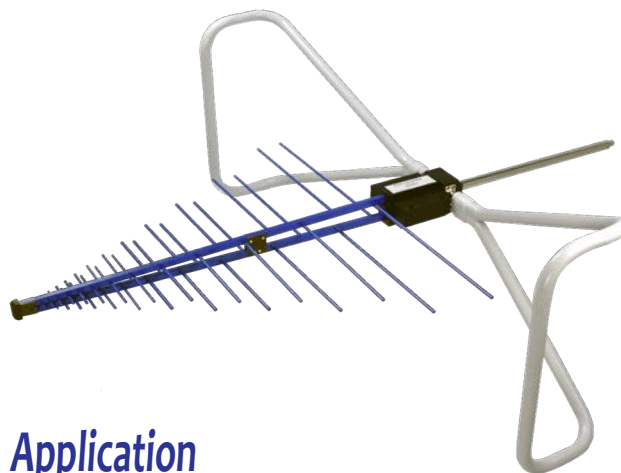
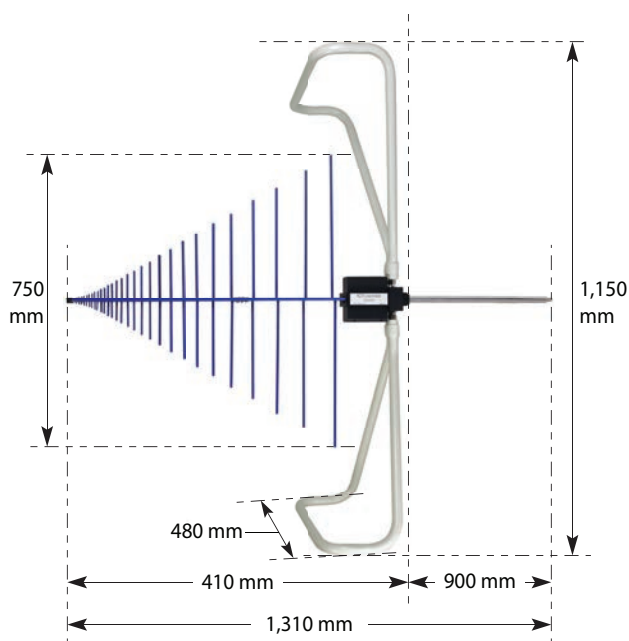
Features

- Wide Frequency Range: 30 MHz to 6 GHz (emissions)
80 MHz to 6 GHz (immunity)
- Complies with ± 1 dB Antenna Symmetry/Balance Requirements of ANSI C63.5 and CISPR 16-1-4
- Good Cross-Polarization Performance
- Individual Calibration Included
- Three-year Standard Warranty

Description

The **ACL-6000** CombiLog is a broadband, linearly polarized hybrid antenna. Hybrid antennas are, put simply, log periodic antennas with the feed lines modified to include a set of low frequency antenna elements. Additionally, common-mode chokes are typically installed to reduce common-mode currents flowing on the outer conductor of the coaxial feed line/receive cable. By essentially combining a log periodic and biconical antenna, a hybrid antenna can typically cover, at a minimum, the frequency range of the combined antenna types.

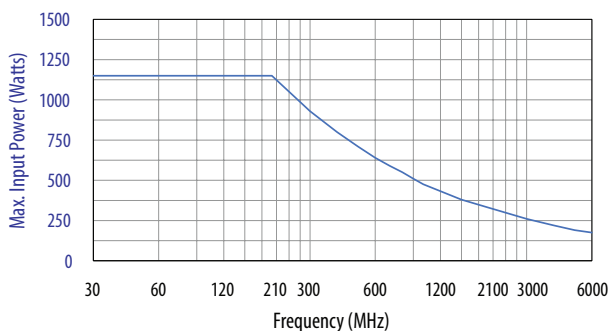
The **ACL-6000** operates from 30 MHz to 6 GHz as a receiving antenna; and from 80 MHz to 6 GHz as a transmitting antenna.



Application

The **ACL-6000** is a qualification-level EMI test antenna for regulatory compliance measurements per most regulatory requirements.

The **ACL-6000** is equally suitable for use as a transmitting antenna over the frequency range of 80 MHz to 6 GHz for product immunity tests. Its power handling capabilities are as follows:



Notwithstanding the above applications, the **ACL-6000** can also be used for test site comparisons, shielding effectiveness tests of large enclosures, field monitoring, site surveys, etc.

Calibration

Each antenna is individually calibrated per ANSI C63.5 with NIST traceability. The calibration data and certificate is provided. Recognized ISO 17025 accredited calibration also available upon request.

Specifications

All specifications are subject to change without notice.
All values are typical, unless specified.

Product Name	CombiLog Hybrid Antenna
Model	ACL-6000
Frequency Range	30 MHz to 6 GHz (as receive antenna - emissions testing) 80 MHz to 6 GHz (as transmit antenna - immunity testing)
Polarization	Linear
Ant. Symmetry (Balance)	< ±1 dB
Cross Polarization Rejection	see graph below
Nominal Impedance	50Ω
Maximum Input Power	see graph on page 1
Connector	N-type (female)
Antenna Factor	see graph below
Isotropic Gain	see graph below
VSWR	see graph below
Specifications	FCC, CISPR, EN, ETSI, etc.
Dimensions (H x W x D)	45.3" x 18.9" x 51.6" [1150 x 480 x 1310 mm]
Weight	11 lbs. [5 kg]

Related Items available from Com-Power...



PAM-103 Preamplifier (1 MHz to 1 GHz)



AT-812 Antenna Tripod



PAM-6000 Preamplifier (1-6 GHz)

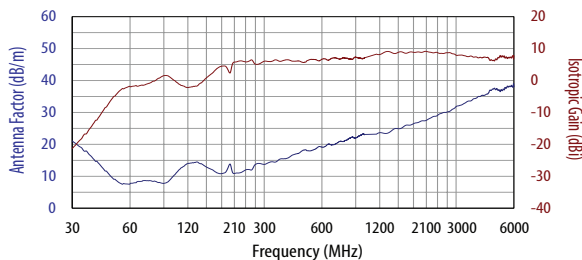
Also Available:

AH-118 Horn Antenna (1-18 GHz)

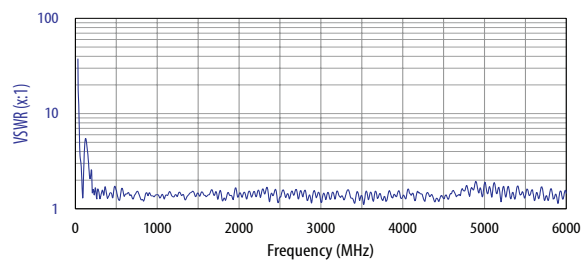
AB-900A Biconical Antenna

AL-100, ALP-100 Log Periodic Antennas

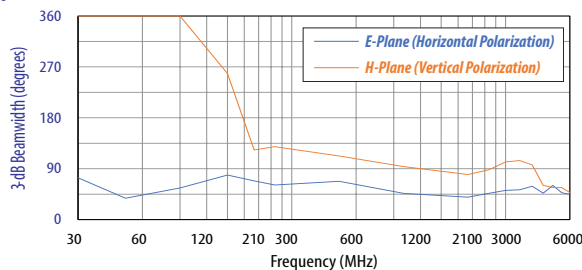
Typical Antenna Factors / Isotropic Gain



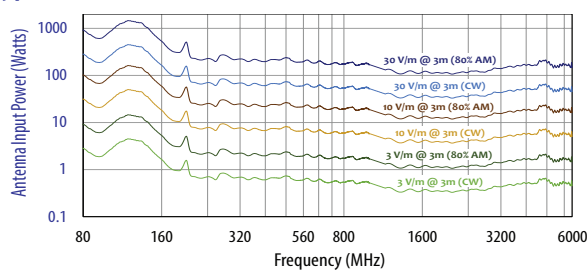
Typical VSWR



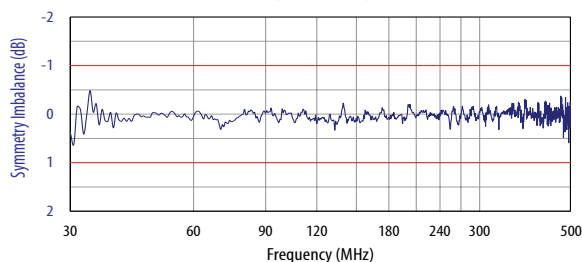
Typical -3 dB Beamwidth



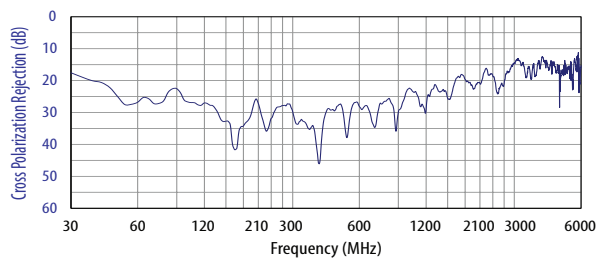
Typical Forward Power Levels



Typical Antenna Symmetry (Balance)



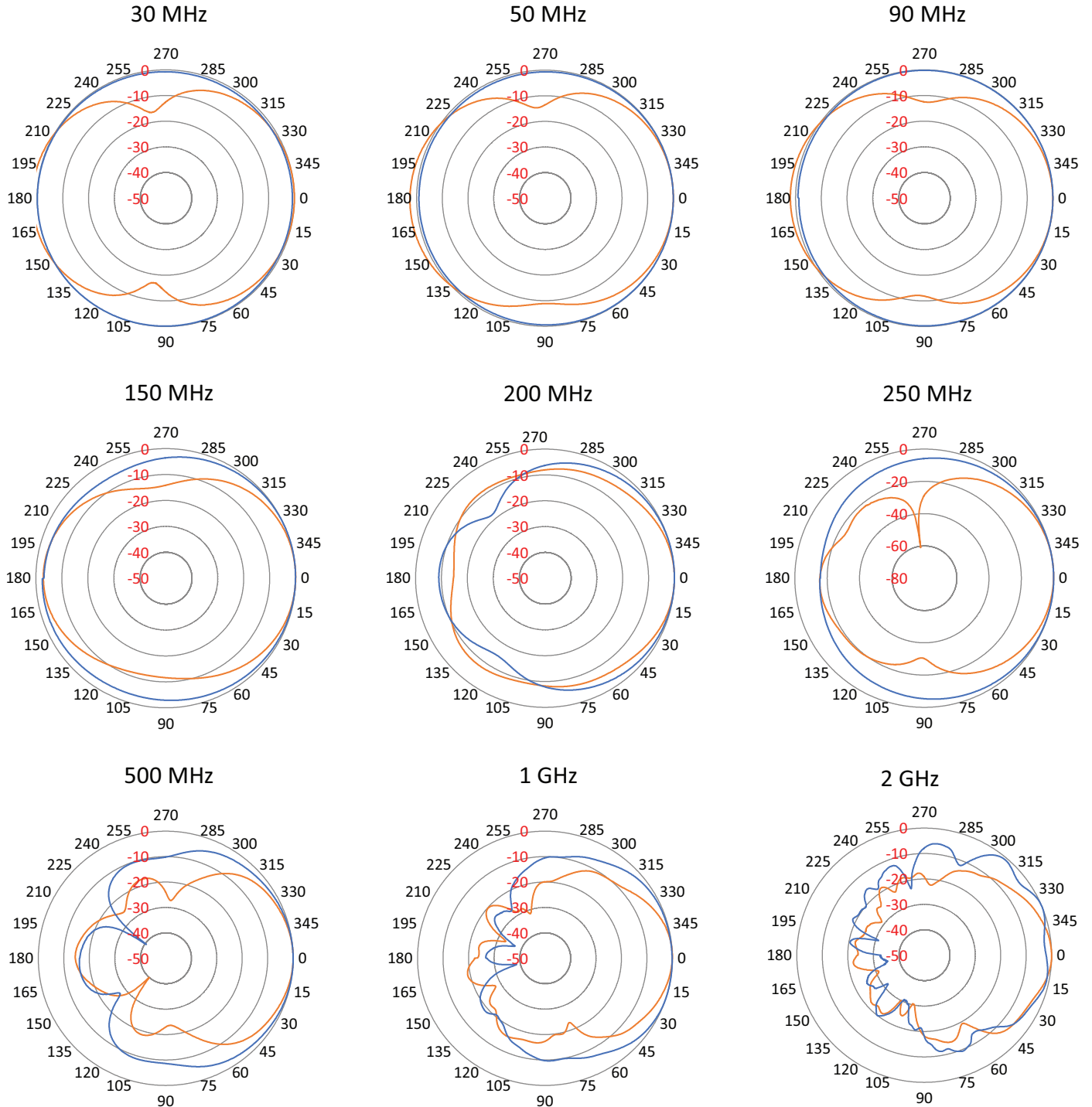
Typical Cross-Polarization Rejection



Typical Antenna Patterns

— *E-Plane (Horizontal Polarization)*

— *H-Plane (Vertical Polarization)*



Typical Antenna Patterns (continued)

— *E-Plane (Horizontal Polarization)*

— *H-Plane (Vertical Polarization)*

