Product Overview

Compact 6-20 meter portable magnetic loop for stealth, limited-space, and rapid-deployment operation, with an available expansion path to VHF/UHF and 15-40 meters.

The Stealth MagLoop Antenna is a compact portable magnetic loop designed for operators who need a small-footprint 6-20 meter TX/RX antenna. Alpha Antenna positions the system for stealth and limited-space deployment and states that it can be set up in about 60 seconds. The standard loop tunes 6 through 20 meters and can later be expanded with the available EmComm Loop mast and inner/outer loop option for VHF, UHF, and 15-40 meter operation.

Key Specifications

Specification	Details
Frequency coverage	6-20 meters (14-54 MHz)
Maximum power	50 W PEP SSB; 25 W CW; 10 W Digital
Impedance	50 ohms
Connector	Female BNC
Loop size	10-inch diameter
Mount	Female 5/8-11 inch
Environmental Ingress protection	IP-63
Directionality	Semi-directional
Operating objective	NVIS and DX
Weight	3 lb
Shipping dimensions	12 × 10 × 4 in

Best For

- Stealth and limited-space amateur radio operation.
- Portable deployments where compact size and rapid setup are priorities.
- Indoor or temporary placement on a table or desk in an office, apartment, camper, tent, or emergency-response vehicle.
- SSB, CW, and digital operation within the published power limits.
- Operators who want a 6-20 meter system now with an available expansion

path to additional VHF/UHF and 15-40 meter coverage.

What’s Included

- Tuning box with 5/8-11 Female mounting threads
- LMR400 outer loop, with
- Integrated Inner Coupling Loop and BNC-F adapter

Setup and Operation

Reshape loop toward oval for 6-10M and circle for 12-20M while tuning. Published setup time is about 60 seconds.

Demonstration

Tuning / SWR

Tuning 6 through 20m can see increased efficiency when the loop is reshaped into an oval for 6-10M and then into a circle for 12-20M.

20 Meters = 1.48:1
15 Meters = 1.07:1
10 Meters = 1.46:1

17 Meters = 1.07:1
12 Meters = 1.36:1
6 Meters = 1.96:1

Performance and Technical Data

Alpha Antenna publishes calculated efficiency figures for the standard 2.18055-foot-circumference loop with a 0.32-inch conductor diameter. The figures below reproduce the values shown on the current product page and compare the loop with a resonant dipole installed one-half wavelength high. Reference Calculator used for efficiencies: STL Antenna Calculator

Band / Center Frequency	S-Units Loss	Published dB Figure
6M / 52 MHz	0.62	-3.7 dB below 100%
10M / 28.85 MHz	1.87	-11.2 dB below 100%
12M / 24.94 MHz	2.22	-13.3 dB below 100%
15M / 21.225 MHz	2.60	-15.6 dB below 100%
17M / 18.118 MHz	3.00	-18.0 dB below 100%
20M / 14.175 MHz	3.62	-21.7 dB below 100%

On-Air Results

Independent reports for SSB contacts made from California during a two-hour period show an average signal report of 4.3/3.2 on 20 meters and 5/3.8 on 10 meters, per the following charts.

Band	20 Meters	
Signal Report	Call Sign	Location
5/3	N6FCM	California
5/3	KA6NPD	California
3/3	KC7DTR	Utah

5/2	N6WL	California
5/5	KJ7RPL	Oregon
4/3	KK7MIE	Idaho
5/4	W2AJG	Arizona
5/5	KG7MAN	Oregon
5/1	N6WL	California
3/2	W3LBY	Oregon
2/3	KK7OJK	Washington
4/3	W7NFR	Oregon
5/5	K7KNB	Oregon
4.3/3.2	**AVERAGE SIGNAL REPORT**	
Band	**10 Meters**	
Signal Report	**Call Sign**	**Location**
5/5	KD9REG	Indiana
5/5	K0MJ	Kansas
5/3	KC5NVZ	Texas
5/3	KS0MIK	Kansas
5/3	K0PJR	Kansas
5/3.8	**AVERAGE SIGNAL REPORT**	

Options

Optional coax, SWR Sounder, tripod adapter, VHF/UHF/15-40M expansion loop components, bag and legs.

Support Resources

- User Manuals: Alpha Antenna User Manuals hub.
- Videos: Related videos.
- Guidance / FAQs: Available HERE.
- Customer Reviews: Scroll to bottom of this page.

We Listen

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5.0

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Excellent construction, quality materials used, and performance. Overall satisfaction with purchase and excellent customer service.

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★★★★★

6-20M Stealth MagLoop Antenna

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Great antenna, grest price and fast shipping!