SG-303 Antenna

sgc Couplers

The SG-303, a high performance mobile antenna, is designed and built to operate in rough terrain and extreme climactic conditions. It has a lifetime warranty.

The SG-303 antenna is a light-weight and low-cost mobile antenna for operation between 1.8 and 30 MHz. Nine feet in length overall, it consists of two sections of helically wound whip, mounted on a sturdy professional weatherproof rubber spring. Mounts on an adjustable ratchet mechanism:

- the base adjusts for the best attachment to the vehicle.
- the antenna ratchet permits orienting the whip from vertical to horizontal.

The SG-303 stands up to the wind loading at highway speeds, as well as to rain, ice, and the occasional tree branch.

The SGC line of antenna couplers—the famous SGC "Smartuners"—packed into a sturdy case, mount on the vehicle as close as possible to the antenna lead-through. Each one gives almost any HF-SSB a major boost in range and clarity. The Smartuner "intelligently" tunes any length antenna. No preliminary tuning or adjustment is required, and the Smartuner operates with any HF transceiver in the 1.6— 30 MHz range and with output power from 3 to 500 watts.

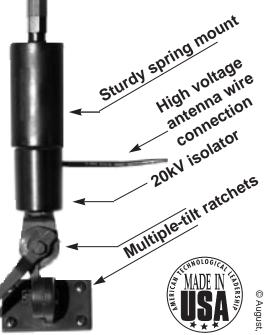
Be sure to see SGC's revolutionary mobile QMS system for mounting antenna and coupler outside the vehicle.



- Heavy duty rubber encapsulated spring mount
- Heavy duty whip antenna
- Adjustable 4-way ratchets

Smartuners

- Waterproof for all weather
- Built-in test equipment indicator
- 1.6 to 30 MHz range
- 3 to 500 watts (depending on model)





The SGC Building 13737 S.E. 26th Street, Bellevue, WA 98005 USA Box 3526, Bellevue, WA 98009 USA 425-746-6310 or 1-800-259-7331 Fax: 425-746-6384 E-mail: SGCMKTG@aol.com Web site: http://www.sgcworld.com

SG-303 Specifications

HF Frequency

Ranges: 1.8 to 30MHz

Maximum Output

Power: 3 to 500 watts (PEP)

voice or CW

Dual Frequency Resonance:

at 12 and 22 MHz

Antenna structure:

Two sections, 50 inches each

Mount: high voltage

insulated 4-way stainless steel ratchet mount

Base: heavy duty rubber

encapsulated spring mount

Feed-through: high voltage wall

feed-through bushing (hole = .890 in.)

Cable: 3 ft. high voltage

wire, one end terminated by a round lug







No Compromise Communications

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Combine an SG-303 with an SGC coupler for HF-SSB mobile operation with high radiation performance

Antenna installation. The heavy duty ratchet mount attaches to a flat surface. Mount high voltage cable away from the metal antenna support. Mount the antenna at the highest point of the vehicle. The high voltage waterproof cable feeds through the vehicle body as close to the base of the antenna as possible.

Coupler Installation. The coupler mounts inside the vehicle and close to the base of the antenna. Braided straps make a good ground.

Antenna ratchet mount. The fourway ratchet mount allows the antenna to be adjusted for operation when the vehicle is in motion.

Excellent communication under even adverse weather conditions can be achieved when the vehicle is moving.

Reclining the antenna. When the vehicle is travelling, this will avoid unnecessary exposure to objects like bridges or trees.

Smartuner Specifications

SG-230 - 200 watts

HF Frequency Range: 1.6 to 30MHz **Power Input Range:** 3 to 200

watts(PEP)

VSWR: Typical—less than 2:1

DC Input: +13.6 VDC

(24 VDC optional)

SG-230PRO - 200 watts

HF Frequency Range: 1.6 to 30MHz

Power Input Range: 3 to 200 watts(PEP)

VSWR: Typical—less than 1.4:1

DC Input: +13.6VDC (24 VDC optional)

Features: Receive pre-amplifier:

res: Receive pre-amplifier; manual control through computer

SG-235 - 500 watts

HF Frequency Range 1.8 to 30MHz
Power Input Range: 3 to 500 watts(PEP)
VSWR: Typical—less than 2:1
DC Input: +13.6VDC

General Specifications

 Input Impedance Range:
 45 to 55 Ω

 DC Operating Range:
 +10.5 to 15 VDC

 (24 VDC optional)
 (24 VDC optional)

Input Current: Average—.9 amps

Random Set

Times: Typical—less than 2 seconds

Recurrent Set

Times: Typical—less than

10 milliseconds

Non-volatile Memory Addresses: 500

Installation: Any position

Operating

Temperature: -35° to $+70^{\circ}$ C

Environmental: Waterproof at

immersion of half meter, half hour

Size Overall: 16 D x 12 W x 3H inches 40.6D x 30.5W x 7.6H

centimeters

Weight: 8 pounds (3.5 kilos)

Case Construction:

Construction: Plastic ABS
weatherproof case
Cable: SGC special cable, 9 feet
coaxial and two power

wire input wires, RMT tune and Smartlock wire

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