

SG-303 Antenna

with

SGC Couplers

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

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.

SGC®

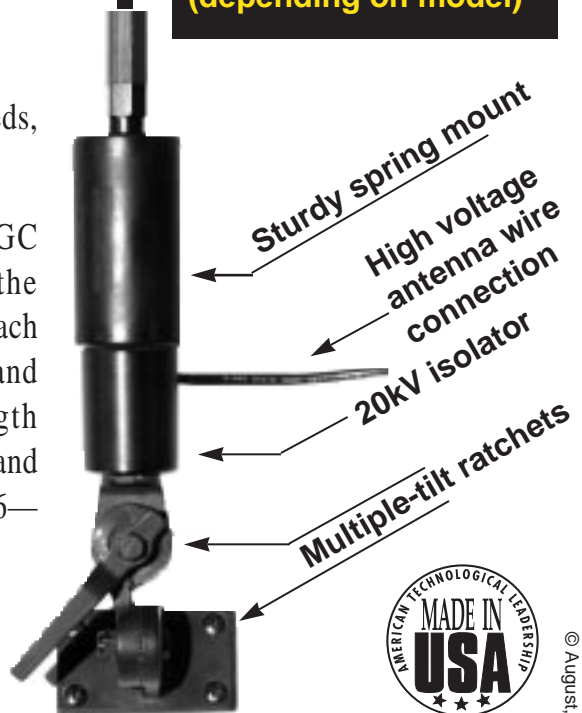
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Box 3526, Bellevue, WA 98009 USA 425-746-6310 or 1-800-259-7331
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SG-303

- 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)



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

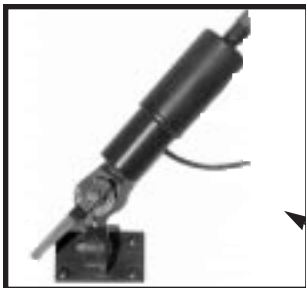
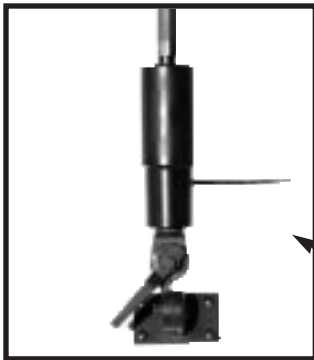
Antenna structure: Two sections, 50 inches each

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



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 four-way 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; 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)
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°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: 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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 No Compromise Communications

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