

VHF COLLINEAR BASE ANTENNA 2 ELEMENTS

AP20199

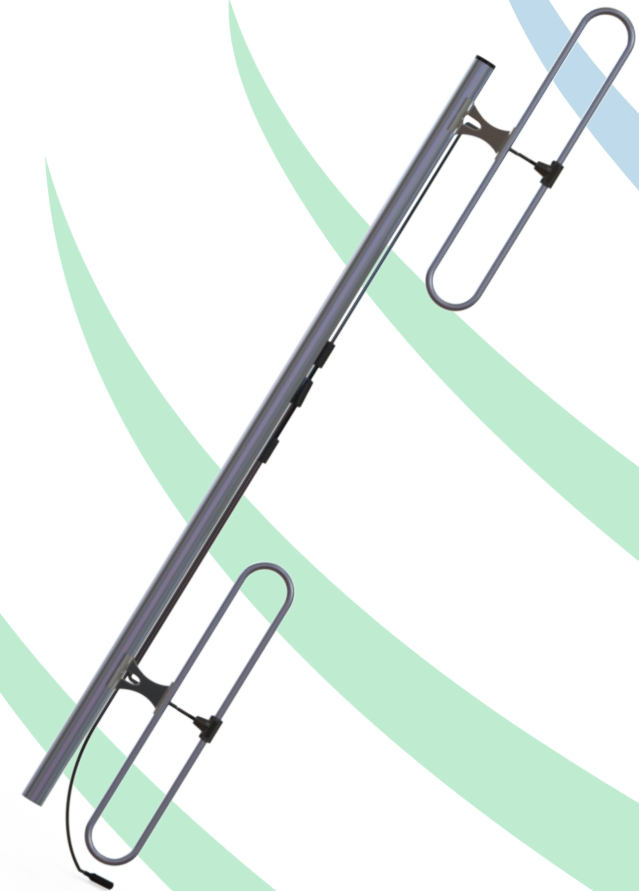


Av. Cidade Fukuyama, 725 - CEP 19064-210 - Presidente Prudente - SP

www.steelbras.com.br



05/06/2024



steelbras[®]
soluções em antenas

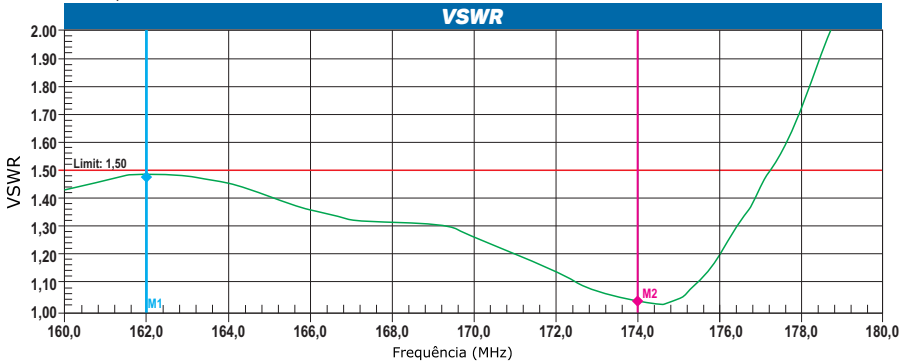
These are base antennas operating in the VHF band, collinear type with folded dipoles. Made of aluminum and coaxial cable. Their radiation pattern has a low main lobe angle, providing excellent signal coverage and repeater station performance.

Available in the following versions:

Frequency	Products	Connector
		Female UHF
162 - 174 MHz	Dipole + Boom + Angle bracket	AP20199
	Dipoles only	AP20109

ELECTRICAL SPECIFICATIONS	
IMPEDANCE	50 Ω
VSWR	≤1,5:1
MAXIMUM POWER	350 W
CONNECTOR	Female UHF
GROUNDING	DC GROUND (DC SHORT-CIRCUIT) 5,15
OFFSET GAIN	dBi
OFFSET VERTICAL HALF-POWER BEAMWIDTH	34,4°
OFFSET HORIZONTAL HALF-POWER BEAMWIDTH	284,0°
OFFSET VERTICAL SIDE LOBE LEVEL	-3,8 dB
MECHANICAL SPECIFICATIONS	
BOOM DIAMETER	50,8 mm
BOOM LENGTH	2000 mm
ELEMENT DIAMETER	19,05 mm
MAIN MATERIAL	ALUMINUM
WEIGHT	9,49 kg
WIND EXPOSURE AREA	0,49 m²
SURVIVAL WIND	220 km/h
OPERATING WIND	100 km/h
ELEMENT SPACING (CENTER TO CENTER)	1500 mm

Example VSWR chart of the AP20199.



Mount the elements on the boom as shown in the illustration alongside, following the marking and logical number sequence (bottom to top, number "1" at the bottom and "2" at the top). The green tapes on the dipoles must face down, and the word "STEELBRAS" (raised lettering) must also be in the position shown in the "Dipole orientation" figure. NOTE: to keep the radiation patterns and gains as described in this document, the elements must be fastened in the correct order, orientation and position according to the markings on the boom. Secure the coaxial cables connecting the elements with good-quality insulating tape. Protect the connection with self-fusing tape to prevent leaks and ensure better performance.

Suggested accessories:

- AP18180** - Antenna mount with adjustable tower clamp.
- AP16952** - Straight female N x female surge protector with
- AP16953** - flange. Straight female N x female surge protector
- AP16951** - without flange. Grounding kit for RG213 cable.
- AP17105** - VHF power divider 1:2 134 to 174 MHz.

