

# Yagi Antenna

87.5–108 MHz

**KATHREIN**  
Antennen · Electronic

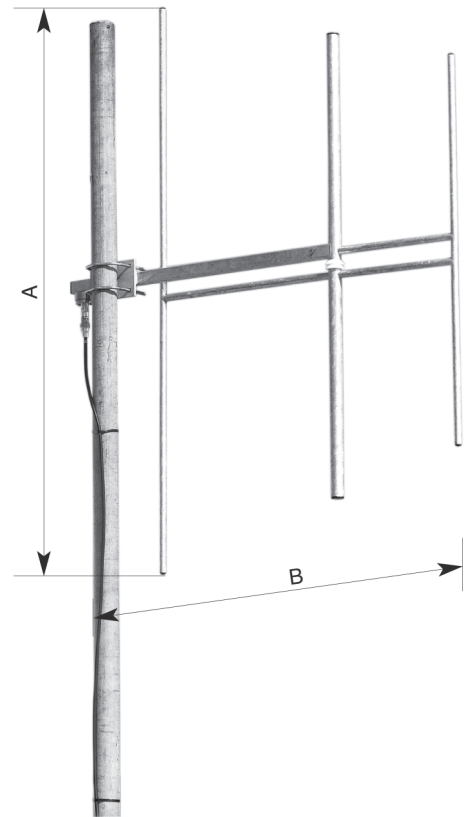
## Polarization

V

- 3 element broadband Yagi antenna.

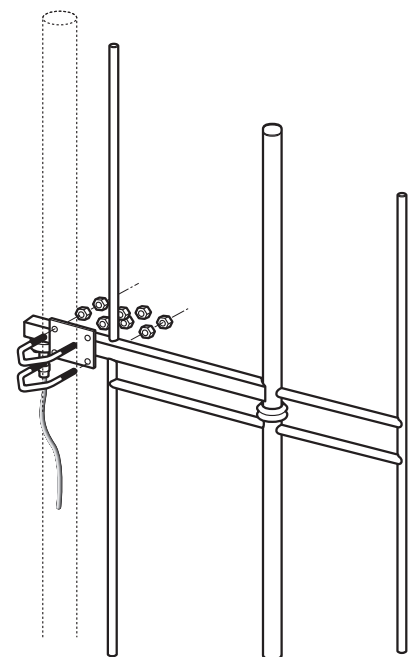
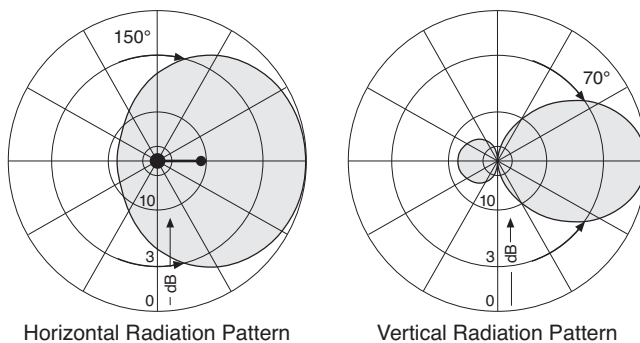
Order No.	770777	770776
Input	7-16 female	7/8" EIA flange
Max. power	3 kW	5 kW
Frequency range	87.5 – 108 MHz	
VSWR	< 1.3	
Gain (at mid-band)	4 dBd	
Impedance	50 Ω	
Polarization	Vertical	
Weight	13 kg	
Wind load (at 160 km/h)	Frontal: 165 N	Lateral: 275 N
Max. wind velocity	225 km/h	

Material: Hot-dip galvanized steel.  
 Mounting: To pipes of 60 – 125 mm Ø by means of 2 U-bolts, supplied.  
 Grounding: Via mounting parts.



A: ~ 1822 mm  
B: ~ 1300 mm

### Radiation Patterns (at mid-band)



Assembly

936.4380/a Subject to alteration.

All specifications are subject to change without notice.  
The latest specifications are available at [www.kathreinusa.com](http://www.kathreinusa.com)

**Please note:**

**As a result of more stringent legal regulations and judgements regarding product liability, we are obliged to point out certain risks that may arise when products are used under extraordinary operating conditions.**

The mechanical design is based on the environmental conditions as stipulated in ETS 300 019-1-4 and thereby respects the static mechanical load imposed on an antenna by wind at maximum velocity.

Extraordinary operating conditions, such as heavy icing or exceptional dynamic stress (e.g. strain caused by oscillating support structures), may result in the breakage of an antenna or even cause it to fall to the ground.

Cylindrical bodies can show crosswind response, which can cause the supporting structure to oscillate and to be damaged. Prismatic bodies, even with non-circular cross-section can show crosswind response, which can cause the supporting structure to oscillate (see EN 1991-1-4 or EN 1993-3-1).

These facts must be considered during the site planning process.

The maximum wind velocities listed should be understood in the sense of working values according to DIN and EN standards. These values include a safety factor (1.5) below the ultimate limit state (elastic limit or permanent deformation). For these wind velocities we guarantee the mechanical safety and the electrical integrity of our antennas.

**The installation team must be properly qualified and also be familiar with the relevant national safety regulations. The details given in our data sheets have to be followed carefully when installing the antennas and accessories. The limits for the coupling torque of RF-connectors, recommended by the connector manufacturers must be obeyed.**

**Any previous datasheet issues have now become invalid.**

Our quality assurance system and our environmental management system apply to the entire company and are certified by TÜV according to EN ISO 9001 and EN ISO 14001.

