

The Kathrein 742 242 directional panel antenna with dual polarization is intended for use in professional fixed-station applications in the 380–470 MHz band. It features:

- Heavy-duty stainless steel and aluminum construction throughout.
- Excellent bandwidth and VSWR specifications.
- Heavy fiberglass radome assures excellent performance in heavy icing conditions.
- All metal parts at DC ground potential.

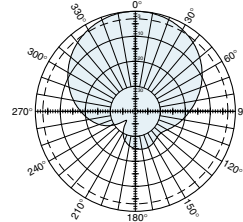
General specifications:

Frequency range	380–430 MHz
Impedance	50 ohms
VSWR	<1.5:1
Intermodulation (2x20w)	IM3: <-150 dBc
Polarization	+45° and -45°
Isolation	> 30 dB
Maximum input power	500 watts (at 50° C)
Electrical downtilt	6 degrees
Connectors	2 x 7-16 DIN female
Weight	41.9 lb (19 kg)
Dimensions	78.7 x 19.4 x 7.5 inches (2000 x 492 x 190 mm)
Equivalent flat plate area	14.8 ft ² (1.375 m ²)
Wind survival rating*	120 mph (200 kph)
Shipping dimensions	81.1 x 22 x 10.8 inches (2060 x 562 x 274 mm)
Shipping weight	48.5 lb (22 kg)
Mounting	See mounting hardware options on reverse.

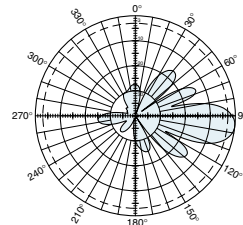
See reverse for order information.

Specifications:	380–430 MHz	430–470 MHz
Gain	14.5 dBi	14.7 dBi
Front to back ratio	25 dB (co-polar)	24 dB (co-polar)
H-plane beamwidth ± 45° polarization	68 degrees (half-power)	65 degrees (half-power)
E-plane beamwidth ± 45° polarization	18 degrees (half-power)	17 degrees (half-power)

* Mechanical design is based on environmental conditions as stipulated in EIA-222-F (June 1996) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.



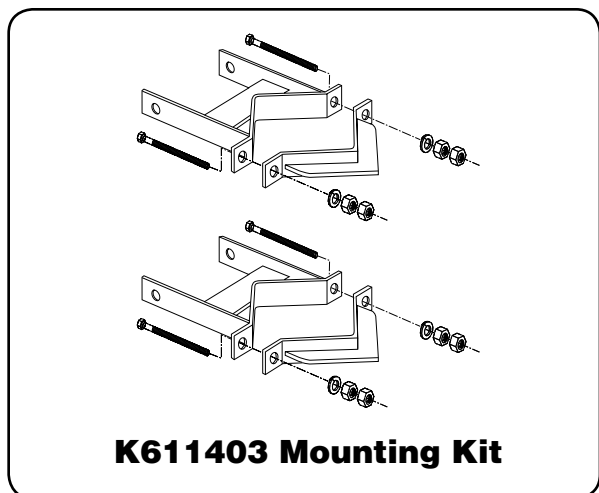
Horizontal pattern
±45°- polarization



Vertical pattern
±45°- polarization

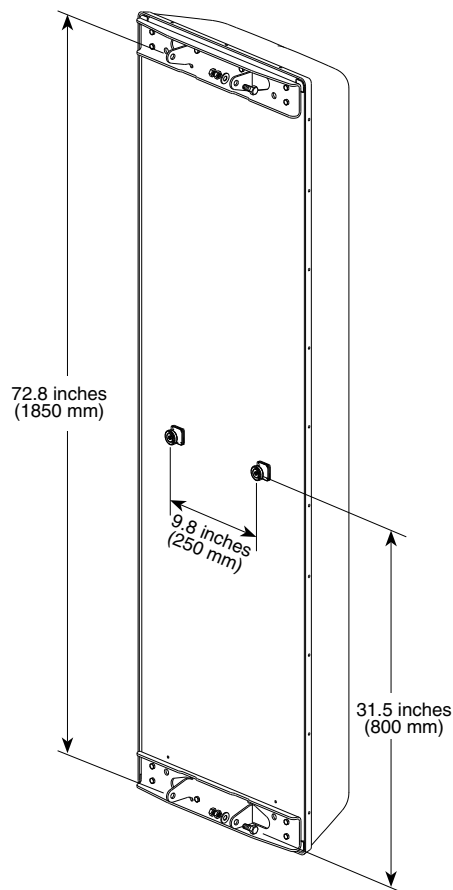


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Mounting Options:

Model	Description
733 736	Mounting Kit for 2 to 4.9 inch (50 to 125mm) OD mast.
K611403 (shown)	Offset Mounting Kit for 4.6 to 8.3 inch (116 to 210 mm) OD mast.
K611404	Mounting Kit for 8.3 to 15 inch (210 to 380mm) OD mast.
K611405	Mounting Kit for 15 to 20.5 inch (380 to 521mm) OD mast.
733 695	Tilt Mounting Kit 0–12 degrees downtilt angle.



Order Information:

Model	Description
742 242	Panel antenna with 7-16 DIN connector

All specifications are subject to change without notice. The latest specifications are available at www.kathrein-scala.com.