

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.

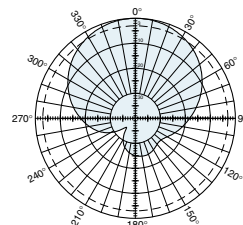
**General specifications:**

Frequency range	380–470 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)
Wind load	at 93 mph (150kph)
Front/Side/Rear	248 lbf / 99 lbf / 347 lbf (1100 N) / (440 N) / (1540 N)
Mounting category	H (Heavy)
Wind survival rating*	120 mph (200 kph)
Shipping dimensions	81.9 x 20.6 x 9.9 inches (2080 x 523 x 252 mm)
Shipping weight	48.5 lb (22 kg)
Mounting	See mounting hardware options on reverse.

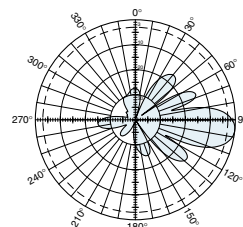
*See reverse for order information.*

<b>Specifications:</b>	<b>380–430 MHz</b>	<b>430–470 MHz</b>
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 TIA-222-G-2 (December 2009) 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

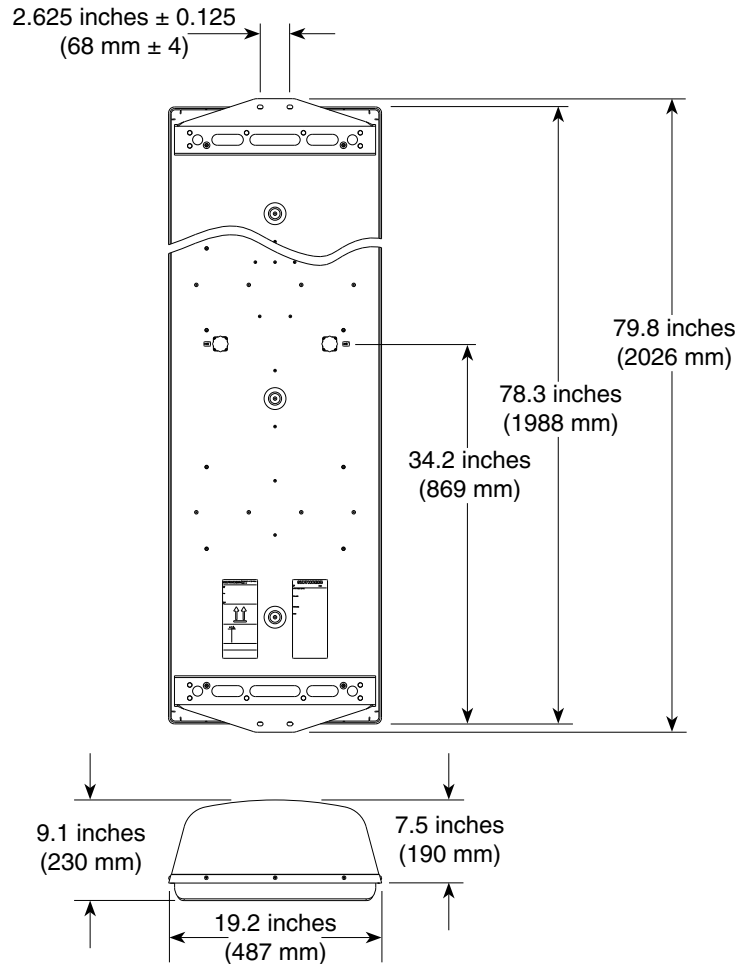
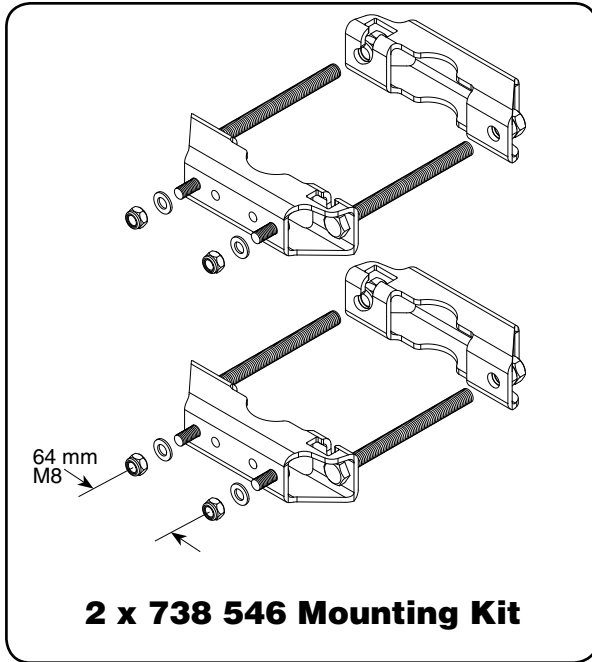


Vertical pattern  
±45°- polarization



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**Mounting Options:**

Model	Description
2 x 738 546 (shown)	Mounting Kit for 2 to 4.6 inch (50 to 115 mm) OD mast.
2 x 850 10002	Mounting Kit for 4.3 to 8.7 inch (110 to 220 mm) OD mast.
2 x 850 10003	Mounting Kit for 8.3 to 15 inch (210 to 380 mm) OD mast.
850 10008	Tilt Mount Kit 0–11 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](http://www.kathrein-scala.com).