

Tri-Sector Slimpole Antenna

Frequency Range

Dual Polarization

Half-power Beam Width

Fixed Electrical Downtilt

0°	120°	240°
1710–2690	1710–2690	1710–2690
X	X	X
80°	80°	80°
0°	0°	0°

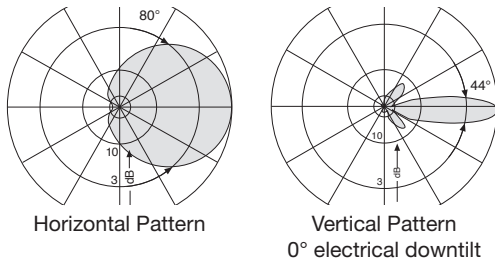
KATHREIN

6-Port Tri-Sector Slimpole 1710–2690 80° 10dBi 0°T

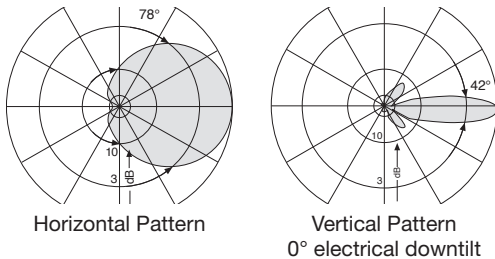
Type No.		80020125				Electrical datas per sector
		1710–2690				
Frequency range	MHz	1710 – 1990	1920 – 2170	2170 – 2490	2490 – 2690	
Polarization	°	+45, –45	+45, –45	+45, –45	+45, –45	
Gain	dBi	2 x 9.5	2 x 10	2 x 10.5	2 x 11	
Horizontal Pattern:						
Half-power beam width	°	80	78	75	73	
Front-to-back ratio, copolar	dB	> 30	> 28	> 28	> 27	
Cross polar ratio	dB					
Main direction 0°		Typically: 20	Typically: 20	Typically: 20	Typically: 20	
Sector ±60°		> 10	> 10	> 10	> 10	
Vertical Pattern:						
Half-power beam width	°	44	42	35	31	
Electrical tilt	°	0, fixed				
Impedance	Ω	50				
VSWR		< 1.5				
Isolation, between ports	dB	> 25				
Intermodulation IM3	dBc	< –153 (2 x 43 dBm carrier)				
Max. power per input	W	100 (at 50 °C ambient temperature)				



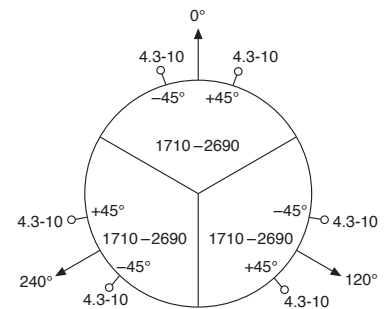
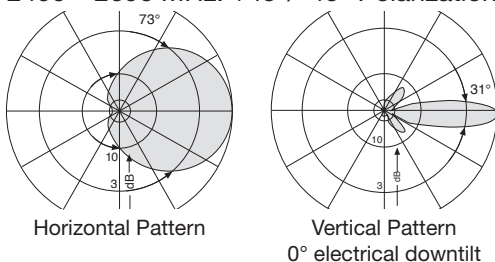
1710 – 1990 MHz: +45°/–45° Polarization



1920 – 2170 MHz: +45°/–45° Polarization



2490 – 2690 MHz: +45°/–45° Polarization



Mechanical specifications		
Input	6 x 4.3-10 female	
Connector position	Bottom	
Weight	kg lb	2.3 5.1
Wind load (at 150 km/h)	N lbf	50 11.2
Max. wind velocity	km/h mph	200 124
Mechanical interface	Flange connection 8 x M6 at a graduated diameter of 136 mm 5.4 inches. Evenness of the opposite surface: 0.5 mm 0.02 inches	
Packing size	mm inches	742 x 220 x 219 29.2 x 8.7 x 8.6
Height / diameter	mm inches	691 / 100 27.2 / 3.9

936.5123/a Subject to alteration.

All specifications are subject to change without notice.
The latest specifications are available at www.kathreinusa.com

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Antenna area:

Reflector screen: Aluminum. **Radiator:** Tin plated zinc.
Cylindrical fiberglass radome: The max. radome diameter is only 100 mm | 3.9 inches. Fiberglass material guarantees optimum performance with regards to stability, stiffness, UV resistance and painting. The colour of the radome is similar to light grey RAL 7035.
All screws and nuts: Stainless steel.

Environmental conditions:

Kathrein cellular antennas are designed to operate under the environmental conditions as described in ETS 300 019-1-4 class 4.1 E. The antennas exceed this standard with regard to the following items:
 – Low temperature: –55 °C
 – High temperature (dry): +55 °C

Ice protection: Due to the very sturdy antenna construction and the protection of the radiating system by the radome, the antenna remains operational even under icy conditions.

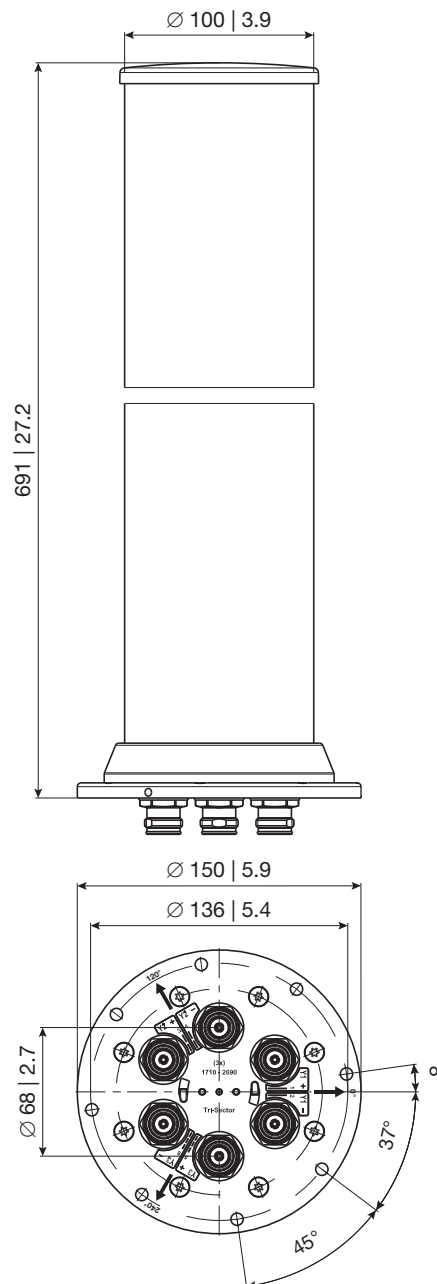
Environmental tests:

Kathrein antennas have passed environmental tests as recommended in ETS 300 019-2-4. The homogenous design of Kathrein's antenna families use identical modules and materials. Extensive tests have been performed on typical samples and modules.

Order Information

Model	Description
800 20125	Tri-sector antenna, 4.3-10 connectors
800 20125K	Tri-sector antenna, 4.3-10 connectors, includes 840 02000 Universal mount & cable concealment shroud
840 02000	Universal mount & cable concealment shroud Includes all attachment hardware
840 02001	Pole mount adapter sleeve for 2" mast

See supplemental mount information



All dimensions in mm | inches

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, which includes 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) or vortex-induced across-wind vibration may result in the breakage of an antenna or even cause it to fall to the ground. These facts must be considered according to DIN 4131 annex A2 or EN 1991-1-4 part 1.4 during the site planning process.

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.

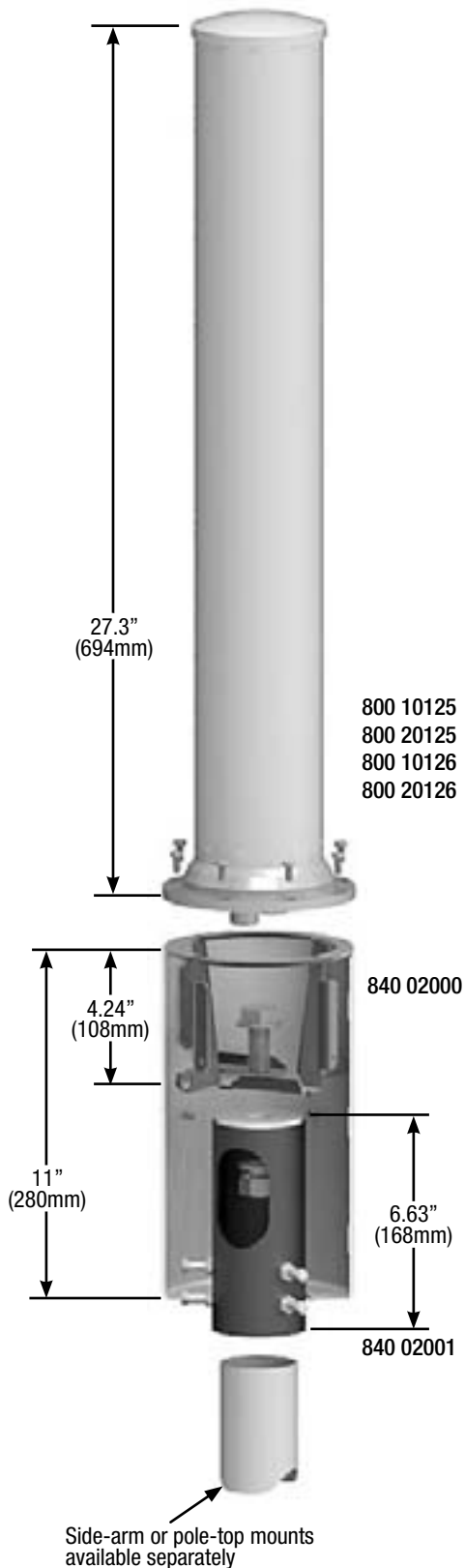
Any previous datasheet issues have now become invalid.



Universal Mount Kit for Kathrein Slim Pole Antennas

800 10125 Tri-Sector, 800 10126 Omni

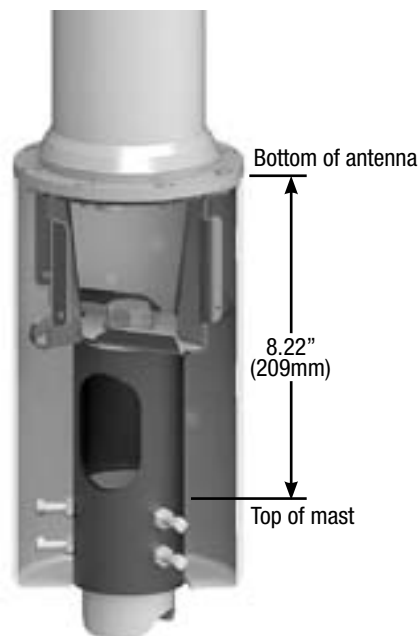
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- Single Ø18mm bolt provides flexible attachment solution
- Designed for use with 1/2" flex coax
- 124 mph / 200 km/h wind survival
- All hardware required for installation is included

The low profile mounting bracket is made of stainless steel which attaches easily to both the antenna and the mounting structure.

The included cable concealment shroud is made of sturdy ABS, and has a protective UV coating. It can also be customized to fit various mast sizes and installations.



Universal Mount installed on Adapter Sleeve, which is designed for 2" masts

Ordering Information

840 02000 - Universal Mount Kit
Includes mount, cable concealment shroud, antenna attachment hardware, 18 mm hex bolt

Antennas listed below with a "K" suffix include the 840 02000 Universal Mount Kit

800 10125K
800 20125K
800 10126K
800 20126K

840 02001 - Adapter Sleeve for above - fits 2" pipe (optional)

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