

Kathrein Scala's XX-polarized adjustable electrical downtilt antennas offer the carrier the ability to tailor sites for optimum performance. Designed for MIMO applications, a single adjustment mechanism controls the left and right antennas simultaneously through the 0°–10° downtilt range. Adjustments can be made by hand or with the use of an optional RCU (Remote Control Unit) that can be field configured to work with either AISG 1.1 or 3GPP/AISG 2.0 protocols (see separate data sheet 860 10118).

- DC Grounded metallic parts for impulse suppression.
- No moving electrical connections.

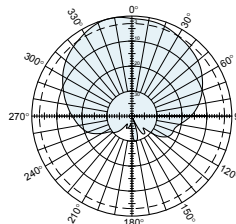
Specifications:

Frequency range	2496–2690 MHz
Gain	2 x 17.5 dBi
Impedance	50 ohms
VSWR	< 1.5:1
Intermodulation (2x20w)	IM3:< -150 dBc
Polarization	+45° and -45°
Front-to-back ratio	>28 dB typical
Maximum input power	250 watts (at 50°C)
+45° and -45° polarization horizontal beamwidth	65 degrees at midband (half power)
+45° and -45° polarization vertical beamwidth	6.2 degrees at midband (half power)
Electrical downtilt continuously adjustable	0–10 degrees
Connector	4 x 7-16 DIN female
Sidelobe suppression for first sidelobe above horizon	18 dB (typical)
Cross polar ratio	25 dB typical bore sight 15 dB typical ±60° sector edges
Null fill	> -1 dBi to 12° below horizon (typical)
Isolation	>30 dB
Weight**	34 lb (15.4 kg)
Dimensions	48 x 12.7 x 2.8 inches (1220 x 323 x 71 mm)
Wind load Front/Side/Rear	at 93 mph (150kph) 140 lbf / 23 lbf / 144 lbf (620 N) / (100 N) / (640 N)
Wind survival rating*	150 mph (240 kph)
Shipping dimensions	58.1 x 14.2 x 5.1 inches (1475 x 360 x 130 mm)
Shipping weight	39.7 lb (18 kg)
Mounting	Fixed and tilt-mount options are available for 2 to 5.7 inch (50 to 145 mm) OD masts.

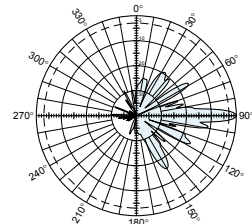
See reverse for order information.

* 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.

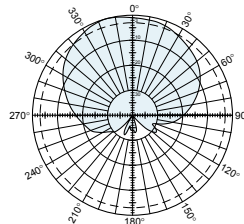
** For antenna only. Add 2 lb (0.9 kg) for each 738 546 mounting clamp (2 required).



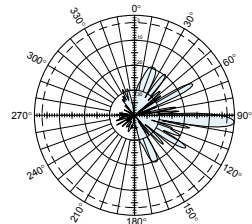
Horizontal pattern
±45°- polarization
0° electrical downtilt



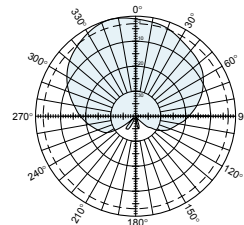
Vertical pattern
±45°- polarization
0° electrical downtilt



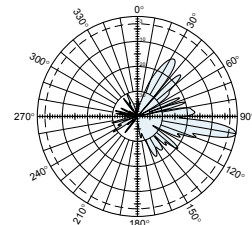
Horizontal pattern
±45°- polarization
5° electrical downtilt



Vertical pattern
±45°- polarization
5° electrical downtilt

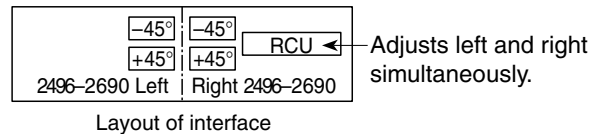
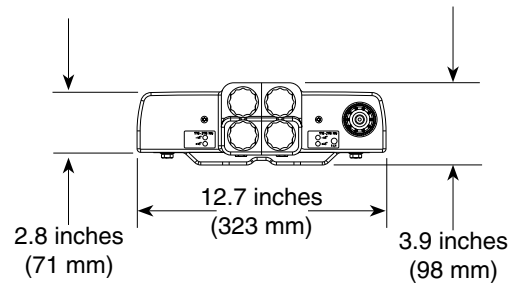
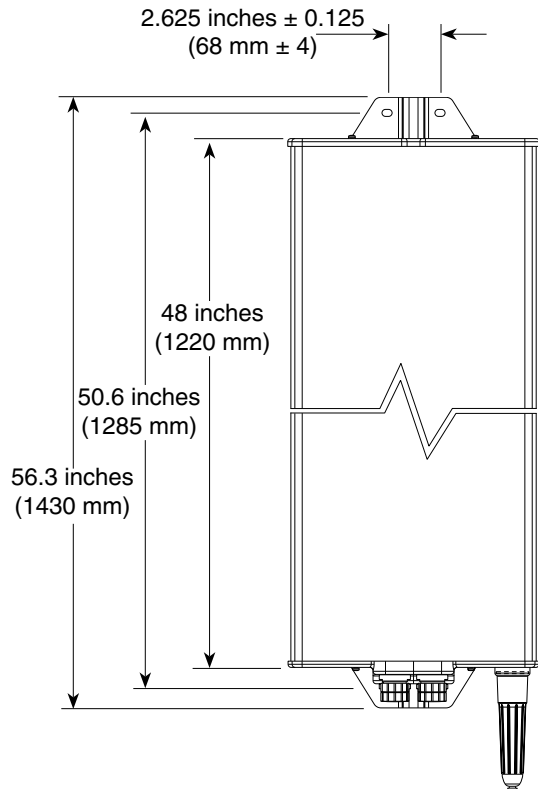
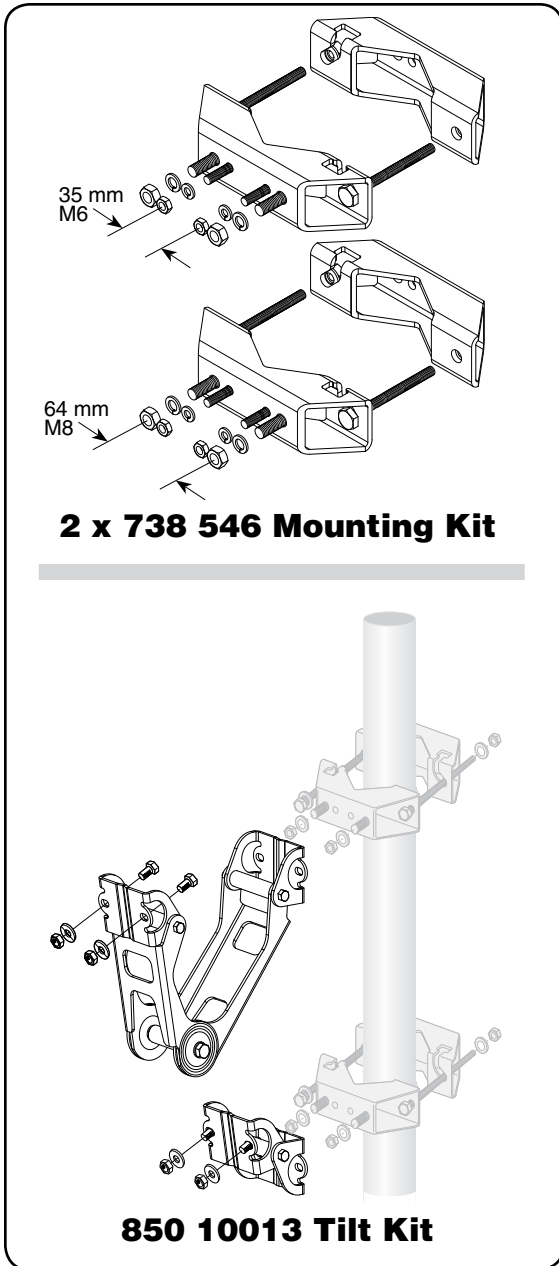


Horizontal pattern
±45°- polarization
10° electrical downtilt



Vertical pattern
±45°- polarization
10° electrical downtilt





Mounting Options:

Model	Description
2 x 738 546	Mounting Kit for 2 to 4.6 inch (50 to 115 mm) OD mast.
850 10013	Tilt Kit for use with the 2 x 738 546 mounting kit 0–15 degrees downtilt angle.

Order Information:

Model	Description
840 10084B	Antenna with 7-16 DIN connectors

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