



## 700 MHz Single Band 4', 65 Degree Antenna

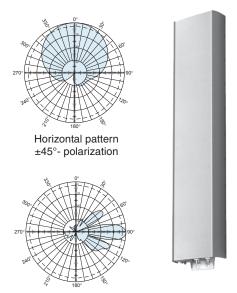
Kathrein's X-polarized antennas are designed for use in digital polarization diversity systems.

- X-polarized (+45° and -45°).
- UV resistant fiberglass radomes.
- · Wideband vector dipole technology.
- DC Grounded metallic parts for impulse suppression.
- · RET motor housed inside the radome and field replaceable.

#### **General specifications:**

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Frequency range	698–894 MHz
VSWR	<1.5:1
Impedance	50 ohms
Intermodulation (2x20w)	IM3: <-150 dBc
Polarization	+45° and -45°
Maximum input power	500 watts per input (at 50°C)
Connector	2 x 7-16 DIN female (long neck) (bottom mounted)
Isolation	>30 dB
Electrical downtilt	0-16 degrees (continuously adjustable)
See reverse for order information	ation.

Specifications:	698-806 MHz	824-894 MHz
Gain	14.2 dBi	14.8 dBi
Front-to-back ratio	>30 dB (co-polar) 32 dB (average)	>30 dB (co-polar) 33 dB (average)
+45° and -45° polarization horizontal beamwidth	68° (half-power)	65° (half-power)
+45° and -45° polarization vertical beamwidth	16° (half-power)	14.8° (half-power)
Min. sidelobe suppression for first sidelobe above main beam average	0° 8° 16° T 16 17 17 dB 16 19 20 dB	0° 8° 16° T 18 17 16 dB 20 20 20 dB
Cross polar ratio Main direction 0° Sector ±60°	24 dB (typical) >10 dB. Average: 15 dB	23 dB (typical) >10 dB. Average: 16 dB



Vertical pattern ±45°- polarization 0°–16° electrical downtilt

## IRT specifications:

Logical interface ex factory <sup>1</sup>	3GPP/AISG 2.0
Protocols	AISG 1.1 and 3GPP/AISG 2.0 compliant
Hardware interface <sup>2</sup>	2 x 8 pin connector acc. IEC 60130-9; according to AISG: – IRT in (male): Control / Daisy chain in – IRT in (female): Daisy chain out
Power supply	10–30 V
Power consumption	<1 watt (standby) <8.5 watts (motor activated)
Adjustment time (full range)	40 sec.
Adjustment cycles	>50,000
Certification	FCC 15.107 Class B Computing Devices







<sup>1)</sup> The protocol of the logical interface can be switched from 3GPP/AISG 2.0 to AISG 1.1 and vice versa with a vendor specific command. Start-up operation of the RCU 86010149 is possible in an RET system supporting AISG 1.1 or supporting 3GPP/AISG 2.0 after performing a layer 2 reset before address assignment. The protocol can also be changed as follows: AISG 1.1 to 3GPP: Enter "3GPP" into the additional data filed "Installer's ID" and perform a layer 7 reset or a power reset. 3GPP to AISG 1.1: Enter "AISG 1" into the additional datafield "Installer's ID" and perform a layer 2 reset or a power reset. After switching the protocol any other information can be entered into the "Installer's ID" field.

 $<sup>^{2)}</sup>$  The tightning torque for fixing the connector must be 0.5 - 1.0  $\,$  Nm ('hand-tightened'). The connector should be tightened by hand only!

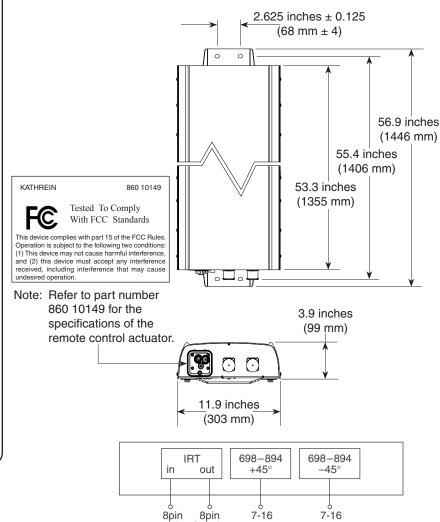


### 800 10734V01

# 700 MHz Single Band 4', 65 Degree Antenna

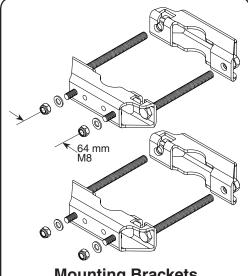
### Mechanical specifications:

Weight	24.3 lb (11 kg) 28.7 lb (13 kg) clamps included
Dimensions H x W x	D 53.3 x 11.9 x 3.9 inches (1355 x 303 x 99 mm)
Wind load Front/Side/Rear	at 93 mph (150kph) 140 lbf / 45 lbf / 160 lbf (620 N) / (200 N) / (710 N)
Mounting category	M (Medium)
Wind survival rating*	150 mph (240 kph)
Shipping dimensions	56.3 x 12.4 x 4.5 inches (1430 x 315 x 115 mm)
Shipping weight	33.1 lb (15 kg)
Mounting bracket	2-point hot-dip galvanized with stainless steel hardware for 2 to 4.5 inch (50 to 115 mm) OD masts



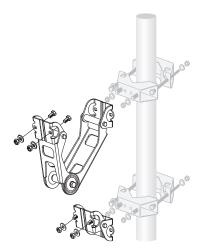
male

female



## **Mounting Brackets**

for use with 2-point mount antennas Mast dia. 2-4.5 inches (50-115 mm) Weight: 4.4 lb (2 kg)



### **Mechanical Tilt Brackets**

for use with 2-point mount antennas Weight: 7.4 lb (3.7 kg) (Model 850 10013)

#### **Order Information:**

Model	Description
800 10734V01	Antenna with mounting bracket 0°-16° electrical downtilt
800 10734V01K	Antenna with Antenna with mounting bracket and mechanical tilt bracket 0°–16° electrical downtilt

\* 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.

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