

800 10046

90° Panel Antenna with Integrated Combiner

- Kathrein's dual band antennas are ready for 3G applications, covering all existing wireless bands as well as all spectrum under consideration for future systems, AMPS, PCS and 3G/UMTS.
- · Wide band operation.
- Exceptional intermodulation characteristics.
- Various gain, beamwidth and downtilt ranges.
- · High strength pultruded fiberglass radome.
- · Integrated combiner reduces RF feedline requirements from 2 to 1.

General specifications:

Frequency range 824–960 MHz 1710–2170 MHz VSWR 1710–2170 MHz 824–960 MHz <1.7:1 870–960 MHz <1.5:1 1710–2170 MHz <1.5:1 Gain 824–960 MHz 824–960 MHz 10 dBi 1710–2170 MHz 11 dBi Impedance 50 ohms Intermodulation (2x20w) IM3: <-150 dBc Polarization Vertical / Vertical Front-to-back ratio 824–960 MHz 824–960 MHz >18 dB 1710–2170 MHz >20 dB Maximum input power 100 watts (at 50°C) H-plane beamwidth 824–960 MHz 824–960 MHz 90 degrees (half-power) 1710–2170 MHz 82 degrees (half-power)
824–960 MHz <1.7:1
870–960 MHz <1.5:1
1710–2170 MHz <1.5:1
Gain 824–960 MHz 10 dBi 1710–2170 MHz 11 dBi Impedance 50 ohms Intermodulation (2x20w) IM3: <-150 dBc
824–960 MHz 10 dBi 1710–2170 MHz 11 dBi Impedance 50 ohms Intermodulation (2x20w) IM3: <-150 dBc
1710-2170 MHz 11 dBi Impedance 50 ohms Intermodulation (2x20w) IM3: <-150 dBc
Impedance 50 ohms Intermodulation (2x20w) IM3: <-150 dBc
Intermodulation (2x20w) IM3: <-150 dBc Polarization Vertical / Vertical Front-to-back ratio 824–960 MHz >18 dB 1710–2170 MHz >20 dB Maximum input power 100 watts (at 50°C) H-plane beamwidth 824–960 MHz 90 degrees (half-power)
Polarization Vertical / Vertical Front-to-back ratio 824–960 MHz 824–960 MHz >18 dB 1710–2170 MHz >20 dB Maximum input power 100 watts (at 50°C) H-plane beamwidth 824–960 MHz 824–960 MHz 90 degrees (half-power)
Front-to-back ratio 824–960 MHz >18 dB 1710–2170 MHz >20 dB Maximum input power 100 watts (at 50°C) H-plane beamwidth 824–960 MHz 90 degrees (half-power)
824–960 MHz >18 dB 1710–2170 MHz >20 dB Maximum input power 100 watts (at 50°C) H-plane beamwidth 824–960 MHz 90 degrees (half-power)
1710–2170 MHz >20 dB Maximum input power 100 watts (at 50°C) H-plane beamwidth 824–960 MHz 90 degrees (half-power)
Maximum input power100 watts (at 50°C)H-plane beamwidth 824–960 MHz90 degrees (half-power)
H-plane beamwidth 824–960 MHz 90 degrees (half-power)
824–960 MHz 90 degrees (half-power)
824–960 MHz 90 degrees (half-power)
1710–2170 MHz 82 degrees (half-power)
E-plane beamwidth
824–960 MHz 33 degrees (half-power)
1710–2170 MHz 19 degrees (half-power)
Connector 1 x 7-16 DIN female
Weight 11 lb (5 kg)
Dimensions 26.1 x 6.1 x 2.7 inches
(662 x 155 x 69 mm)
Wind load at 93 mph (150kph)
Front/Side/Rear 40 lbf / 11 lbf / 45 lbf
(175 N / 47 N / 200 N)
Wind survival rating* 120 mph (200 kph)
Shipping dimensions 31.7 x 6.8 x 3.6 inches
(804 x 172 x 92 mm)
Mounting Fixed and tilt mount options are available for

* 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.



824-960 MHz



H-plane Horizontal pattern Vertical - polarization E-plane

Vertical pattern Vertical - polarization

1710-2170 MHz



H-plane Horizontal pattern Vertical - polarization



E-plane Vertical pattern Vertical - polarization





800 10046

90° Panel Antenna with Integrated Combiner



Mounting Options:

Model	Description	
2 x 131 1847		Mounting Kit for 2 to 5.7 inch (50 to 145 mm) OD mast.
742 263		Three-panel Sector Mounting Kit (120 deg. ea.) for 3.5 inch (89 mm) OD mast.
732 327		Tilt Kit for use with the above mounting kits, 0–40 degrees downtilt angle.







Order Information:

Model	Description
800 10046	Antenna with 7/16 DIN connector

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

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991 Email: communications@kathrein.com Internet: www.kathrein-scala.com