

Overview

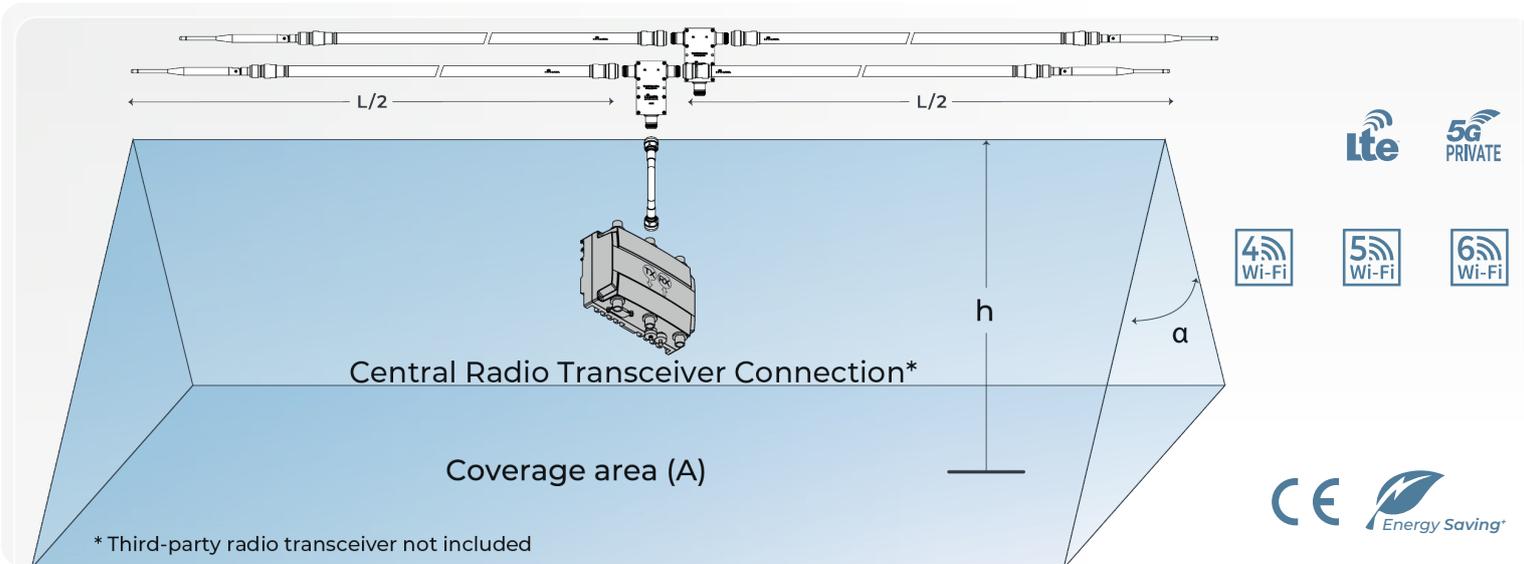
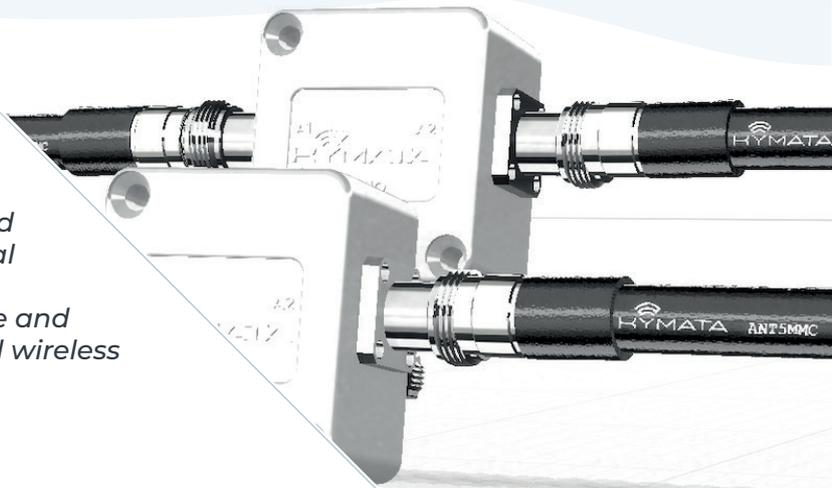
Kymata delivers a groundbreaking solution for indoor and outdoor radio coverage in extensive logistical and industrial areas. Kymata Antennas and Amplifiers effectively and economically resolve signal issues, ensuring superior performance. With intuitive management through a web interface and SNMP, complete and immediate control of industrial wireless networks is achievable.

ANT5MM Series Antennas

The ANT5MM antenna is a customizable, broadband MIMO 2x2 solution with a central connection for the radio transceiver. It ensures extended and consistent radio coverage performance over a wide frequency range from 1.5 to 6GHz. This antenna is ideal for various applications, including Wi-Fi 802.11n/ac/ax, 4G/5G mobile networks, and DECT1900.

The ANT5MM integrates seamlessly with any Wi-Fi 802.11n/ac/ax access point, whether new or existing, and is compatible with any radio device operating within the 1.5 to 6GHz frequency range that features a removable external antenna. Optimized for frequencies from 1.5GHz to 6GHz, the ANT5MM ensures uniform signal distribution across the area of interest.

With customizable lengths and a central transceiver connector, the ANT5MM series provides flexible installation options. Additionally, these antennas can be mounted on ceilings using specialized Kevlar mounting kits, which are available separately.



Definition of design parameters for selecting the most suitable model according to specific requirements

L = total length of the antenna

h = height above ground level of the antenna

A = nominal coverage area with average signal strength on the ground >-82dBm

a = nominal antenna aperture angle

Related Accessories

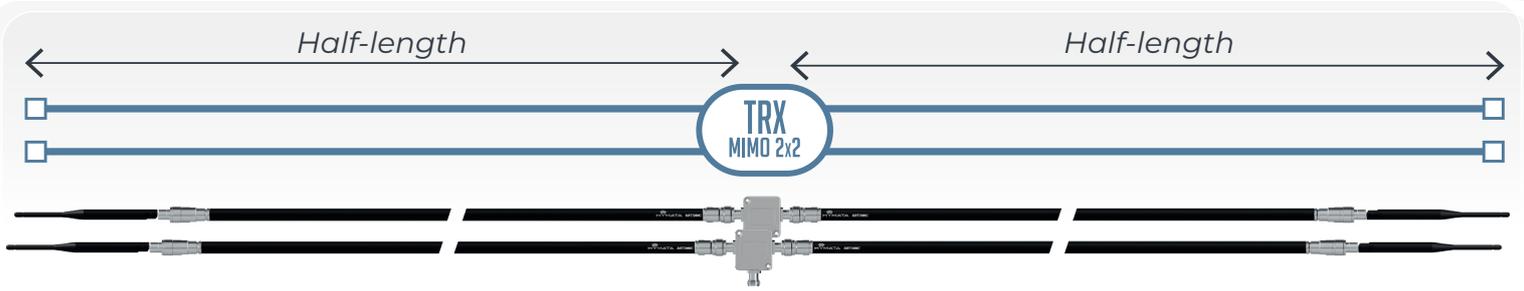
Mounting Kit: MKT1H1 — MKT601 — MKT1H0 — MKT600 — MKT1HX — MKT60X

Jumpers: JMPRPSMANM — JMPNMNM

Integrated Passive Devices: IPD11HS — IPD11CS

Amplifiers: AMP2 — AMP5 — AMP2SM — AMP5SM

Diplexer/Coupler: IPD25D — IPD3BAND

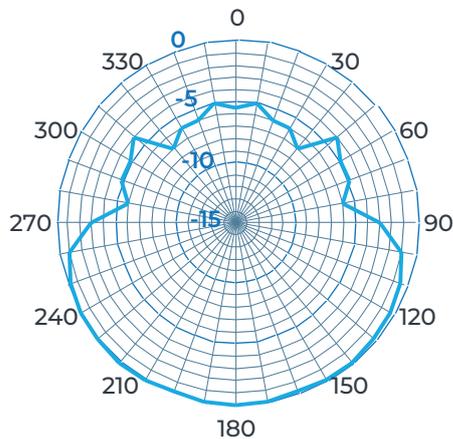


Technical specifications

Product Code	ANT5MMC40	ANT5MMC50	ANT5MMC60	ANT5MMC70	ANT5MMC80
Operating Band	1.5 GHz ~ 6.2 GHz				
TRX Connector Position	Central				
Overall Length L	up to 40 m	up to 50 m	up to 60 m	up to 70 m	up to 80 m
Coverage Area (A) @ 2.4 GHz @ h = 8 m	2.200 m ²	2.750 m ²	3.300 m ²	3.850 m ²	4.400 m ²
Coverage Area (A) @ 5.2 GHz @ h = 8 m	1.950 m ²	2.250 m ²	2.450 m ²	2.650 m ²	2.750 m ²
Average Gain @ 2.4 GHz	-25 ± 3 dBi	-26 ± 3 dBi	-27 ± 3 dBi	-29 ± 3 dBi	-30 ± 3 dBi
Average Gain @ 5.2 GHz	-26 ± 3 dBi	-27 ± 3 dBi	-28 ± 3 dBi	-30 ± 3 dBi	-31 ± 3 dBi
-3 dB Angle (α) in H-plane	160°				
Longitudinal Electrical Tilt	60° @ 2.4 GHz - 50° @ 5.8 GHz				
Front-to-Back Ratio	5 dB				
Average Coupling Loss @ 2.4 GHz	73 dB ± 2 dBi				
Average Coupling Loss @ 5.2 GHz	74 dB ± 2 dBi				
Characteristic Impedance	50 Ω				
Minimum Bend Radius	200 mm				
TRX Connector Type	Nf (a specific jumper JMPX is required to connect the AP)				
Operating Temperature	from -50° C to +85° C				
Diameter	17 mm				
Clearance Distance*	100 mm				
Certifications	IEC 60754-1/-2; IEC 61034; IEC 60332-1; IEC 60332-3-24; CPR: Cca s1 d0 a1, EN50575-2017				

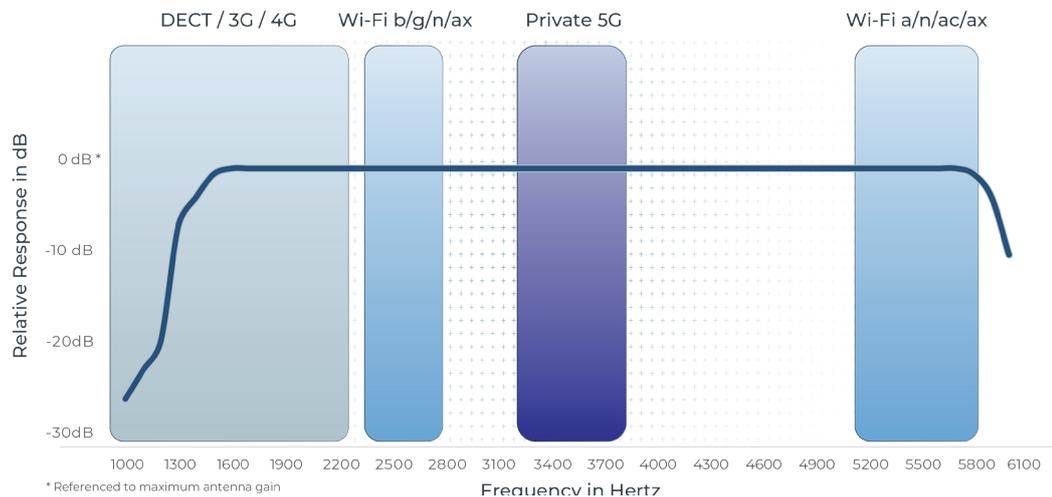
*Minimum distance to be maintained during installation between the Kymata antenna and walls or other surfaces

Radiation pattern



Trasversal plan (radial)

Frequency response



* Referenced to maximum antenna gain