Small Cells

Solutions for Future Network Demands
A revolution is currently under way in the field of mobile communications, the expectations of the subscribers are to have unlimited access to mobile services and social networks at every time and place. Prognoses show an enormous growth of mobile data traffic within the next few years. According to current estimations, operators will be facing an increase of global mobile data traffic by 2019 by a factor of 10 compared to 2014.

To meet these demands, operators and system suppliers are starting to investigate in deploying new network solutions resulting in small cell roll-outs. The concept of small cells is to provide capacity in high data traffic areas by adding specific low-power base station solutions. Compared to macro cells, which cover cell sizes of 1 to 20 km, small cells are aimed at providing coverage from 50 up to only 300 m.
Kathrein also provides a Micro C-RAN solution for indoor capacity. For more information, please visit www.kathrein.de/indoor.
Kathrein offers different antenna solutions in order to support their customers in their effort to deploy small cell outdoor solutions for 3G and LTE. Not only do these antennas meet reliable electrical parameters, the unobtrusive design also minimises the visual impact especially in sensitive urban areas. Small cells are well-suited for providing dedicated capacity to high-use urban hotspots, such as hotel lobbies, restaurants, malls, train stations, airports and city streets.

1, 2, or 4-Port Antennas
- Ultra-broadband design with different frequency combinations (single, dual-band)
- Different pattern version, e.g. cross-polarised omni, bi-directional, tri-sector
- MIMO capability
- 2 to 9.5 dBi gain
- Very small dimensions
- Smart innovations, e.g. antenna with 2 independently adjustable radiator elements
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4, 8, or 12-Port Antennas
- Ultra-broadband design:
  698-960/1695-2690 MHz
- Available with omni, two, or tri-sector pattern
- With integrated GPS antenna
- MIMO capability
- 6 to 13 dBi gain
- Low visual impact

Kathrein Street Connect Antenna
- Invisible capacity enhancement solution
- Appearance of manhole cover merges with existing infrastructure
- Ultra-broadband design:
  1695-2690 MHz
- Proven MIMO performance

4.3-10 Connector
Kathrein provides antennas and antenna line products with a new connector series. This 4.3-10 connector is an advanced development of the 7-16 interface and represents the new generation of mobile communication interfaces.

The advantages of this new connector are:
- Reduced dimensions on the bottom plate for more installation space
- Improved PIM-stability and performance
- Eased installation, lower tightening torque
- The universal 4.3-10 jack can be used with 3 different connector types (screw type, push pull type and hand screw type).