



KATHREIN are pleased to announce the introduction of a new antenna family.

Enhanced Side-Lobe Suppression for lobes above and below horizon

The first version, **80010614** is **NOW AVAILABLE**. Further models will follow.

Application

Vertical radiation patterns consist not only of a main beam but also of unavoidable side-lobes. Previous KATHREIN ESLS antennas were designed to reduce the side-lobes above the horizon. This feature is useful for cases where the side-lobes can point towards, and thereby possibly create interference with adjacent cells. These ESLS antennas are currently a standard in common 3G mobile networks. With the latest antenna concept KATHREIN looks beyond this and can now offer side-lobe suppression above and below the horizon. Enhanced Side-lobe suppression for Transmitting Frequencies in a sector 40°- 180° below the horizon is thereby achieved for the first time. Depending on the frequency the suppression is more than 25dB. The vertical radiation pattern characteristic now looks exceptionally clean and energy is focused and concentrated in the main beam.

Key features of the forthcoming antenna

Type No.	80010614		
Frequency range	1710 – 1880 MHz	1850 – 1990 MHz	1920 – 2200 MHz
Polarization	+45°, -45°	+45°, -45°	+45°, -45°
Gain at 0° tilt	2 x 17.3 dBi	2 x 17.7 dBi	2 x 18 dBi
Half-power beam width:	Horizontal: 66°	Horizontal: 64°	Horizontal: 62°
	Vertical: 7.9°	Vertical: 7.5°	Vertical: 7.2°
Front-to-back ratio (180° ±30°)	≥ 25 dB	≥ 25 dB	≥ 25 dB
Cross polar ratio at 0°	25 dB	25 dB	25 dB
Sector ±60°	≥ 10 dB	≥ 10 dB	≥ 10 dB
Electrical tilt	2°–10°, continuously adjustable		
Sidelobe suppression in the sector 40°–180° below horizon	> 23 dB	> 24 dB	> 25 dB
Dimensions	1302 / 155 / 69 mm		

- Please contact your local KATHREIN partner for any further queries you may have or mail to antennas.mobilcom@kathrein.de -