Why LTE and MIMO?

Dear Customers,

LTE is the network of the future with MIMO technology also playing a steadily growing role in the field of antennas.

Choosing the correct antenna is key to being able to benefit from the high performance offered by current devices such as routers.

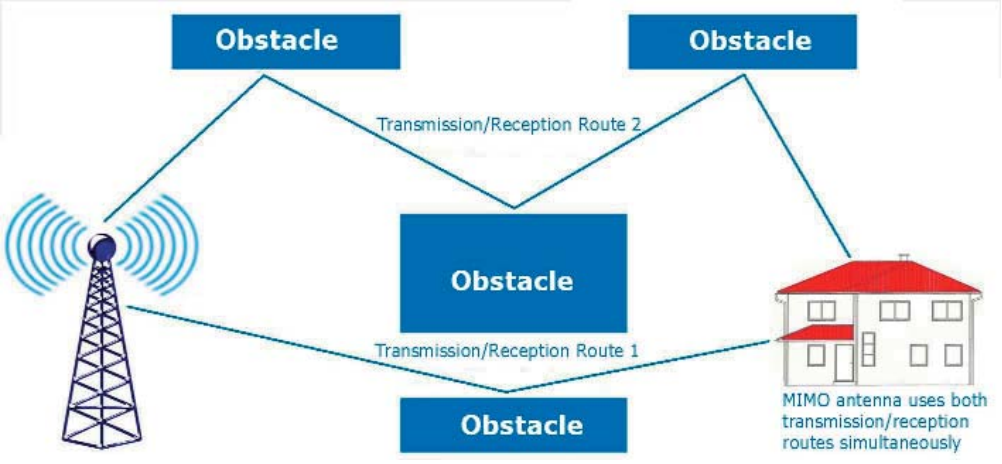
MIMO technology is essential if you wish to exploit your LTE devices' maximum bandwidth capacity, which is, in theory, in excess of 100 Mbit. In addition to this, MIMO plays a role in the approval process for your end devices.

The technology involves the installation of two antennas, which are polarized 90 degrees apart, into one housing. This is also the reason why such antennas have two inlets instead of one. High end LTE routers such as our MC-MRL support this feature.

A normal "single antenna" in the field will not be able to utilize all of the additional bandwidth MIMO offers over HSPA. The result is that your system is held back.

Please contact us if you have any questions.

MIMO technology example



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DIVERSITY vs MIMO

Dear Customers,

While LTE is the network of the future GSM, EDGE and UMTS/HSPA naturally continue to play an important role. Many devices such as routers, e.g. our MC-MRH, thus employ Diversity technology.

This technology should, however, under no circumstances be confused with MIMO technology. While the former also includes two connections they are, however, used to connect two completely different, separate antennas.

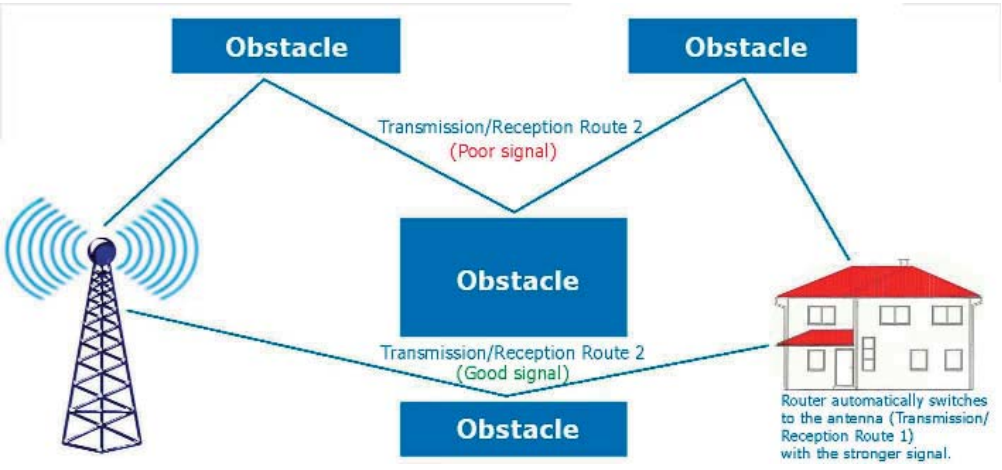
MIMO technology processes signals to both connections simultaneously, while Diversity connections process only one signal, namely the one which is strongest at that moment in time. This ensures that your end device always receives the best signal.

Diversity technology is used in UMTS/HSPA networks.

Two separate antennas for one Diversity-enabled device thus result in significantly increased signal stability but not, however, in increased bandwidth as is the case where MIMO technology is concerned.

Please contact us if you have any questions.

Diversity technology example



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