## RX OCTENNA 1785-1805

## High gain flat panel antenna for $1785-1805 \mathrm{MHz}$ with integrated bandfilters \& LNA. To be used with STAR1800 wireless digital audio link receiver.

The antenna is an attractively styled flat panel dipole array.
The antenna is small and lightweight, due to an extremely high aperture \& dimensional efficiency in comparison to helix, corner or parabolic antennas.
The radiation patterns are very clean.
Thanks to the ABS housing, there is no performance degradation, even under rain, snow or ice conditions.

## Typical specifications:

Passive gain: 13 dBi (flat within 0.3 dB )
Active gain: 30 dB
Absolute max input power LNA: +10 dBm
Beamwidth: $+/-17^{\circ}(\mathrm{H}-$ pol azimuth $) \&+/-22^{\circ}(\mathrm{V}-$ pol azimuth $)$
Sidelobe max.: 18dB
Front/back: 30dB
Connector: Female F 75 Ohm
To enable the reception of even the smallest useful signal, a minimum distance to 1.8 GHz GSM base-stations \& handsets need to be regarded. The minimum distance from the Octenna in the main direction to these are: 200 m for basestations, 28 m for handsets (these figures are only the worst case scenario: as soon as the basestation is $30-40^{\circ}$ off the main beam, it may be much closer without problems). If it happens that a 1800 MHz GSM base station is exactly in the main direction at less than 200 m , a sharper bandfilter can be ordered which will suppress the GSM signal.

Lightning protection: all parts connected to earth.
Polarisation: H or V mountable
Polarisation isolation: at least 30 dB ( H -mounted / vertically polarised wave and vice versa)
Mounting: 2 brackets bi-chromed
Dimensions: front: octangle with largest dimensions: $305 \times 305 \mathrm{~mm}$
Mounting plate: square with corners cut off: $315 \times 315 \mathrm{~mm}$
Overall thickness: 38 mm
Weight: 0.9 kg .
Graphs: (small asymmetry in sidelobes due to internal wiring \& electronics)

Azimuth for H-pol application:


Azimuth for V-pol application:


