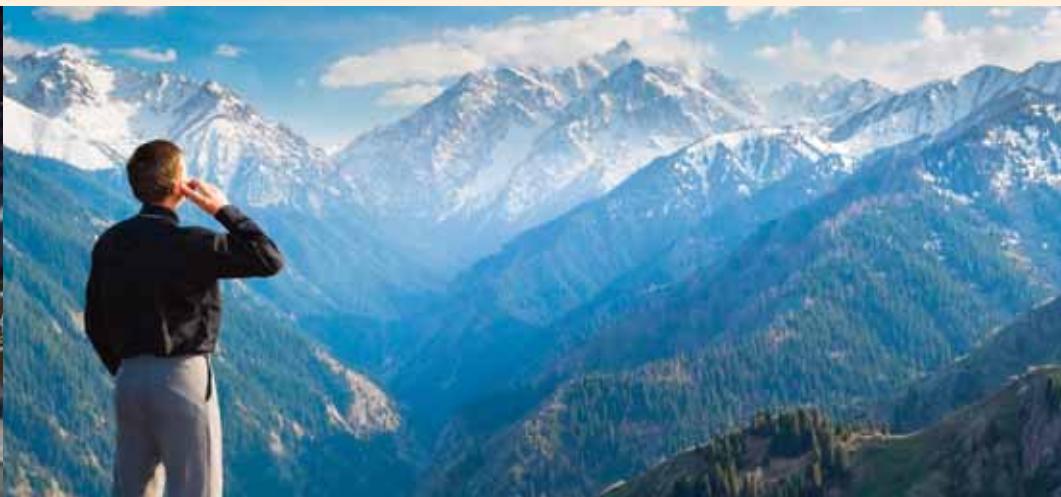




STEERING SMARTPHONES  
TO BE EVEN SMARTER



Steerable miniaturised antenna that improves wireless connectivity and doubles the battery life of mobile devices. The end of weak signals, dropped calls and short battery life.



## Global Problem

**Antenna technology has not kept pace with the functionality and performance of smart phones – meaning every new generation of smart phone performs less well than its predecessor.**

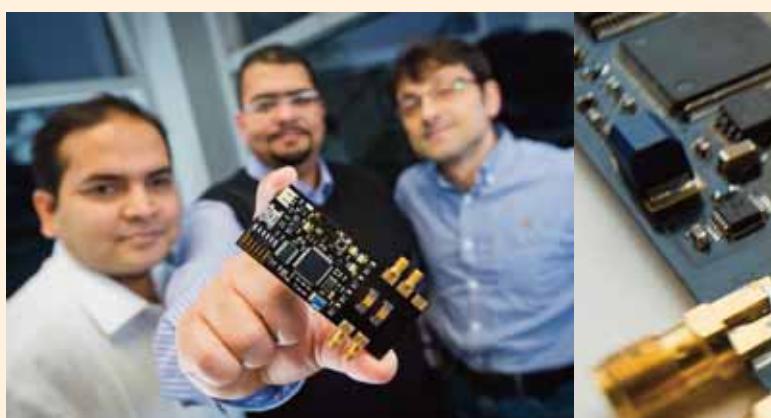
There are currently one billion smart phones in circulation, a number that is expected to double in the next three years. Growing usage, processing capability, functionality and greater screen size increases the volume of data traffic from each unit daily.

Battery life and connectivity are now critical problems for the expanding global mobile device market. Added to that, antenna account for 50% of power consumption in standby mode, a figure which increases during calls.

## Universal Solution

At Sofant, we have developed three core technologies to combat this problem. Together they provide a directional and steerable antenna that greatly improves connectivity and battery life for mobile devices, addressing head-on the key challenges faced by device manufacturers.

We believe our high performance miniaturized steerable antenna is unique and will change the performance and user experience of smart phones forever, steering smart phones to a smarter future by enabling the best wireless experience and doubling battery power.





## SmartAntenna™

Sofant's three core technologies comprise RF MEMS, antenna and software. This powerful combination provides a steerable and focused antenna – SmartAntenna™ – that can lock onto the best signal available at any given time.



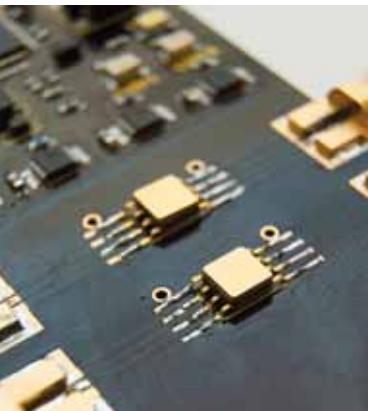
By improving the rate of data transfer, SmartAntenna™ provides a higher level of connectivity than conventional antenna. It also consumes 90% less energy, boosting battery life.

As well as benefiting individual mobile devices, SmartAntenna™ will also reduce network congestion caused by weak signals and dropped connections, diminishing the need for more base stations.

SmartAntenna™ will also address other mobile device constraints including suitability for large numbers of frequency bands.

Whilst Sofant SmartAntenna™ technology is still at demonstration level, the MEMS component already outperforms the best of those currently available on the market. The next key steps to delivering a SmartAntenna™ product ready for market are:

- customize antenna design to meet manufacturer specific requirements
- further develop the software to facilitate communication with other mobile device components
- mass manufacture RF MEMS switches



## AvtoRF™

Although a steerable antenna solution is our primary focus at Sofant, we have responded to strong demand from mobile device manufacturers for specific tunable modules by introducing a commercial brand, AvtoRF™, which integrates the RF MEMS switch, software and other circuits to deliver key tunable RF products.

The AvtoRF™ product range is based on the integration of the MEMS switch, embedded software and electronic circuits to realise various key modules. This is a clear step forward to achieving a fully integrated steerable antenna solution and complete tunable RF modules.



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