

News Release: For Immediate Release

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Plasma Antennas Provides SelectaBeam SP-2510 Selectable Multi-beam Antennas to the FP7 SMART-Net Project

Plasma Antennas ships exciting new antenna prototypes incorporating selectable nulling capabilities for use in the SMART-Net test bed.

Winchester, United Kingdom (15th July 2010) – Plasma Antennas Ltd (www.plasmaantennas.com), the leading provider of integrated selectable multibeam antennas today announced that it has provided prototype SelectaBeam SP-2510 antennas to SMART-Net, an EU Framework Programme 7 (FP7) project. The SMART-Net project is investigating novel system architectures and protocols that will support the next generation of wireless mesh networks. In addition to Plasma Antennas Ltd, the SMART-Net project partners include THALES Communications SA, Create-Net, France Telecom SA, the University of Surrey and the Universitea Politehnica din Bucuresti.

The SelectaBeam SP-2510 is a high-performance selectable multi-beam antenna operating over the frequency range 5.3-5.8GHz. Based on Plasma Antennas' advanced beamforming technologies, the SelectaBeam SP-2510 offers high-speed switching between 9 high-gain directional beams across $\pm 45^\circ$, combined with a sectoral floodlight beam pattern providing full coverage across the 90° forward sector. The SelectaBeam SP-2510 also incorporates a selectable nulling capability that allows deep nulls to be created around the main beam patterns, minimizing the impact of strong or close-in sources of interference. A number of SelectaBeam SP-2510 pre-production prototypes will be incorporated into the WiMAX-based SMART-Net test bed located at France Télécom-ORANGE Laboratories, Lannion, France.

“Obviously we are proud to be part of the SMART-Net project and delighted to be involved in defining the next generation of high-performance wireless mesh networks” said Dr. David Hayes, Managing Director of Plasma Antennas. “The SelectaBeam SP-2510 combines many advanced features – including selectable nulling – within a compact and highly affordable smart antenna” he added. “We are very excited about the results that the SMART-Net test bed will provide” he continued.

The licensed-exempt frequencies above 5GHz represent an attractive band of spectrum for a range of fixed and nomadic wireless telecommunications applications, including backhaul and relay. The major challenge facing equipment providers and network operators seeking to exploit this spectrum is the increasing amount of interference present in these bands.

Developed with this challenge in mind, the SelectaBeam SP-2510 supports very high-speed beam switching, enabling a high-gain directional beam to be multiplexed between target network nodes on a sub-frame basis. With low sidelobes, these directional beams ensure optimal signal-to-interference ratios are maintained for each communication link in a point to multi-point network. In addition, with selectable nulling, the SelectaBeam SP-2510 allows selection of derivative beam patterns that contain deep nulls at various positions to either side of the main beams. These deep nulls enable suppression of particularly powerful or close-in sources of interference.

About Plasma Antennas

Plasma Antennas Limited is the leading provider of smart, integrated, multibeam antennas targeted at wide range of wireless communications and sensing applications. Based on advanced and patented beamforming technologies, Plasma Antennas' selectable multibeam antennas extend range, reduce interference and increase throughput, resulting in greatly enhanced spectral efficiency. Our products provide similar benefits to electronically steered phased arrays - but at a fraction of the cost, together with much wider band operation.

Plasma Antennas was founded in 2001. Now based in Winchester, United Kingdom, Plasma Antennas is privately held with funding from investors that include Oxford Technology Management Ltd and NESTA.

For more information, visit www.plasmaantennas.com.

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