

# LANCOM receives European patent for pioneering integration of WLAN, Wireless ePaper & beacons

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## **Innovation for efficient radio operation**

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Aachen, July 11, 2018 – LANCOM Systems, the leading German manufacturer of network infrastructure solutions for the public and private sectors, has received a European patent (EP 2 993 950) for integration of different radio technologies into its E-series WLAN access points. In addition to classic Wi-Fi, the access points can also control Wireless ePaper Displays for room signage or electronic shelf labels (ESL), and beacons. The benefits: lower costs, longer service life of the displays and maximum sustainability.

LANCOM addresses three very important trends with this integration. While Wi-Fi is almost ubiquitous today, providing wireless network access in all branches of industry, Wireless ePaper Displays are a state-of-the-art digital signage solution for numerous applications: from digital room signage to electronic shelf labels (ESL) in supermarkets, right through to optimization of production and logistics processes. Beacon technology (iBeacon and Eddystone), on the other hand, offers the basis for innovative location-based services in many places.

**Interference-free parallel operation with great advantages**

All three radio technologies communicate within the same frequency band of 2.4 GHz, which, in principle, can cause interference between them. LANCOM has solved this problem with its newly patented integration, achieving substantial advantages in practice.



Unlike wireless LAN, ePaper radio technology focuses not on maximum bandwidths, but on extremely low power consumption. This is to allow Wireless ePaper Displays to be operated by battery, without any external power supply, for many years. However, if there are disruptions in radio operation, the power consumption of the displays increases and their service life diminishes.

In the past, ePaper Displays therefore required costly installation and operation of a dedicated radio infrastructure. Yet, interference with existing wireless LAN or beacon infrastructure often still occurred. This resulted in the batteries of the displays having to be changed very frequently, causing a sharp increase in operating costs.

LANCOM has coordinated all three radio technologies perfectly, combined them in the devices of its E series and thus enabled interference-free and highly efficient parallel operation. LANCOM's E-series access points are deployed in large enterprises, hospitality, healthcare, industry and logistics, and in educational establishments. In retail, they ensure efficient connectivity in numerous leading chains throughout Germany and Europe.

The European patent (EP 2 993 950) now granted acknowledges LANCOM's innovation excellence and provides protection against imitation in all 38 member states of the European Patent Convention.

#### LANCOM Systems background:

LANCOM Systems GmbH is the leading German manufacturer of networking solutions for business customers and the public sector. LANCOM offers professional users secure, reliable and future-proof infrastructure solutions for local-area and multi-site networks (WAN, LAN, WLAN), as well as centralized network management based on software-defined networking technologies (SD-WAN, SD-LAN, SD-WLAN). The LANCOM routers, gateways and WLAN solutions are developed and manufactured in Germany, and a selection of the VPN portfolio is certified by the German Federal Office for Information Security (BSI) for the protection of particularly sensitive networks and critical infrastructures (EPCIP). LANCOM Systems has its headquarters in Würselen near Aachen, Germany. Customers include small



**LANCOM**  
SYSTEMS

and medium-sized enterprises, government agencies, institutions, and major corporations from Germany, Europe and, increasingly, worldwide.

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