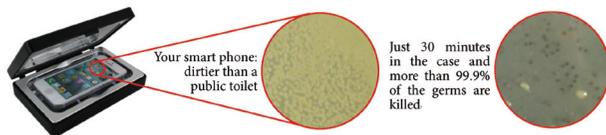


# Control the spread of infection from wireless mobile devices

According to one study, more than 90% of smartphones used by hospital staff members are contaminated with bacteria. **Sensor Electronic Technology** has the solution to the problem.

**T**echnologies such as Bluetooth, Wi-Fi and, more recently, medical body area networks are enabling hospitals to redefine how patient data is collected, analysed, shared and stored, and, together with wireless mobile devices such as smartphones and tablet computers, will simplify the way in which patients' conditions are monitored and tracked by hospital staff.

The advantages in a switch to wireless technologies are numerous. However, it also presents a new set of risks in controlling the spread of infections via the mobile devices, as they are taken between patient rooms and passed between hospital workers. Infections caught in hospitals, nursing homes and doctors' offices represent a major problem that, according to *The Wall Street Journal*, affects more than a million people annually, and which the Center for Disease Control and Prevention links to nearly 100,000 deaths each year.



Sensor Electronic Technology has developed a disinfection unit that doubles up as a protective case for mobile devices.

## Vehicle for infection

A study published in *Annals of Clinical Microbiology and Antimicrobials* found that nearly 95% of smartphones used by hospital staff members are contaminated with bacteria. In fact, your smartphone can carry more than ten times more bacteria than the average toilet seat, according to microbiologists at the University of Arizona, and more than 18 times more bacteria than a flush handle on a public toilet, according to *Which?* magazine.

When your phone is dirty, there's not much point in washing your hands. On average, 30% of the bacteria on your phone will end up on your hands. Now think about sharing your phone or tablet with other hospital workers.

Sound far-fetched? Not according to a thief in Uganda who last year stole a phone from an isolation ward, where patients were taken during an Ebola outbreak. Shortly after, the thief returned to the hospital and checked himself in with symptoms of the life-threatening disease.

## The future is light

Using UV light to disinfect is not new, and its use to disinfect water, surfaces and air has become commonplace around the hospital, in industry and at home. By using tiny UV LED



When used in tandem with correct personal hygiene, the case allows hospital staff to carry smartphones without fear of spreading infection.

lights, Sensor Electronic Technology has been able to shrink the disinfecting device to the size of a smartphone, and has developed a small, battery-operated unit that can be carried by hospital staff and even with a belt clip. Larger cases are also being developed for tablet computers.

The disinfection unit also doubles up as a protective case for mobile devices, safeguarding them against knocks, scratches and spills. And, because it's portable, it's easy to use: every time the device is put safely back in the case, it's disinfected, so that when you come to use it, you can be sure it's germ-free. This trouble-free operation ensures that hospital staff will use the case all day, every day, and when its use is combined with correct personal hygiene, it will reduce the risk of spreading infection.

But despite its small size, the case is highly effective at eliminating bugs on all surfaces of your device, even the hard-to-reach areas. In fact, the case has been proved to eliminate 99.9% of bacteria on a phone in a single use.

See the case in action at the CTIA Wireless Association Pavilion in the Information and Communications section of the Medica trade fair (Booth E-04, Hall 15) from 20–23 November 2013. For more information about UV LEDs, visit Sensor Electronic Technology at Compamed at Medica (Booth L-31, Hall 8a). ■

## Further information

Sensor Electronic Technology  
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