Disinfectant-Ready Housing vs. Anti-Microbial Additives

Overview:
Healthcare professionals are at the front-line of patient care, ensuring safety through infection control. The Centers for Disease Control & Prevention advise, ‘Cleaning is the necessary first step of any sterilization or disinfection process.’ As a partner in the field, Honeywell knows that providing healthcare professionals with traditional data collection hardware is not enough. Products must be designed specifically to withstand the regular cleaning required to properly address the infection control needs of the healthcare industry.

Data collection hardware is traditionally housed in amorphous plastics. These plastics, including polycarbonate/acrylonitrile-butadiene-styrene (PC/ABS), are usually chosen because they can be easily manufactured. Housings made of PC/ABS contain a loosely packed structure which makes it easier for chemicals to penetrate the plastic. Repeated use of chemical cleansers, as recommended by the CDC for infection control, ‘may cause discoloration, swelling, hardening, and cracking of rubber and certain plastics after prolonged and repeated use.’ Cracks can also lead to hardware failure. Hardware failure increases the total cost of ownership by causing increased downtime and repair/replacement costs. More serious consequences, such as the corrosion of electronic circuitry and electrical fires, can also occur.

Manufacturers are increasingly incorporating anti-bacterial or anti-microbial additives into healthcare products. This can give end users the impression that the products perform “better” than comparable products without this labeling, when in fact the CDC notes, ‘No evidence is available to suggest that use of these products will make consumers and patients healthier or prevent disease...No data support the use of these items as part of a sound infection control strategy.’ The CDC’s “Guidelines for Environmental Infection Control in Health Care Facilities” reiterate, ‘cleaning and disinfecting environmental surfaces as appropriate is fundamental in reducing their potential contribution to the incidence of healthcare-associated infections.’

Honeywell is the first company in the automatic identification and data collection (AIDC) industry to introduce disinfectant-ready housings, a healthcare solution designed specifically to address this concern. Disinfectant-ready housings (DRH) are built to withstand frequent exposure to any of our recommended cleaning solutions, allowing healthcare professionals to execute the 5 rights of patient safety—right patient, right drug, right time, right dose and right route—while minimizing the risk of spreading infectious diseases.

Honeywell helps you protect your investment, and more importantly, your patients.

‘Anti-Microbial’ Is not Enough - Data Collection Hardware Still Needs to be Cleaned:
There is a current trend towards the use of antimicrobial-impregnated materials in healthcare products. These products are marketed as inhibiting the growth of mold and bacteria on the product’s surface for the life of the product. Honeywell has considered the use of anti-microbial impregnated plastics for our scanner housings.

Although any added protection towards the growth of mold and bacteria is intriguing, it does not replace the need for valid hygienic practices to maintain proper infection control. Data collection hardware made with anti-microbial impregnated plastics still need to be routinely cleaned in the healthcare environment.

Unfortunately, most traditional plastics used for scanner housings (even those with anti-microbial impregnation) are amorphous, they are not as resistant to chemicals and are prone to cracking when cleaned with anything other than soapy water. Over time, these cracks may compromise the integrity of the device, leaving end users with units that fail to function properly.
Our healthcare customers require solutions that can be cleaned with strong chemicals to disinfect their scanners. Honeywell is proud to provide a solution that addresses this need.

**Solution: Disinfectant-Ready Housings**

Society is more germ-conscious than ever. Effective infection control policy requires the cleaning and disinfecting of environmental surfaces, regardless of whether or not they contain anti-microbial additives. Healthcare end users must address this increasing concern over infectious agents that cause disease or illness, leading to the use of strong cleaners to disinfect their data collection hardware.

From this demand, Honeywell developed disinfectant-ready housings (DRH) with a plastic that is crystalline in nature (tightly packed chains that prevent chemicals from seeping in). These optional housings will be better able to resist the effects of popular cleaning agents.

Several Honeywell solutions including the Xenon™ 1900h, the Xenon 1902h, the Dolphin 99EXhc, the Dolphin® 9700hc, the Dolphin 9900hc and the Dolphin 7800hc are now available with disinfectant-ready housings.

**Summary**

Honeywell, a knowledgeable and committed partner, has listened to healthcare professionals express the need for data collection hardware designed specifically for use at the point-of-care—where infection control is critical. The use of anti-microbial additives in data collection hardware sounds appealing; however, it does not eliminate the need for such products to be cleaned routinely. Infection control procedures demand the use of strong cleaners and disinfectants, which cause cracking and damage to traditional plastic housings. Honeywell’s disinfectant-ready housings have been designed to alleviate this problem, ensuring that the Xenon 1900h, the Xenon 1902h, the Dolphin 99EXhc, the Dolphin 9700hc, the Dolphin 9900hc and the Dolphin 7800hc can withstand frequent exposure to harsh chemicals. This solution allows healthcare professionals to minimize the spread of infectious diseases while administering medication to patients, resulting in improved accuracy and patient safety, and a lower total cost of ownership.

**Recommended Cleaning Solutions**

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<th>Products available with white disinfectant-ready housings</th>
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www.honeywellaidc.com