

Cleaning And Disinfecting POC



Product Manager,
Advantech iHealthcare

Cleaning And Disinfecting Your Facility

Everyday Steps, Steps When Someone is Sick, and Considerations for Employees

How to clean and disinfect

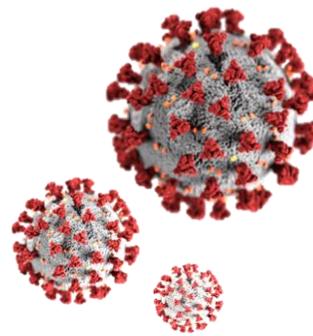
Wear disposable gloves to clean and disinfect.

Clean

- **Clean surfaces using soap and water.**
Practice routine cleaning of frequently touched surfaces.

High touch surfaces include:

Tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, sinks, etc.



cdc.gov/coronavirus

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Cleaning And Disinfecting Your Facility

How to clean and disinfect

Disinfect

- Clean the area or item with soap and water or another detergent if it is dirty. Then, use a household disinfectant.
- **Recommend use of EPA-registered household disinfectant.**
Follow the instructions on the label to ensure safe and effective use of the product.

Many products recommend:

- Keeping surface wet for a period of time (see product label)
- Precautions such as wearing gloves and making sure you have good ventilation during use of the product.

- **Diluted household bleach solutions may also be used** if appropriate for the surface.
 - Check the label to see if your bleach is intended for disinfection, and ensure the product is not past its expiration date. Some bleaches, such as those designed for safe use on colored clothing or for whitening may not be suitable for disinfection.
 - Unexpired household bleach will be effective against coronaviruses when properly diluted.



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How to clean and disinfect

Disinfect

Follow manufacturer's instructions for application and proper ventilation. Never mix household bleach with ammonia or any other cleanser.

Leave solution on the surface for at least 1 minute.



To make a bleach solution, mix:

➤ 5 tablespoons (1/3rd cup) bleach per gallon of water

OR

➤ 4 teaspoons bleach per quart of water

- **Alcohol solutions with at least 70% alcohol may also be used.**



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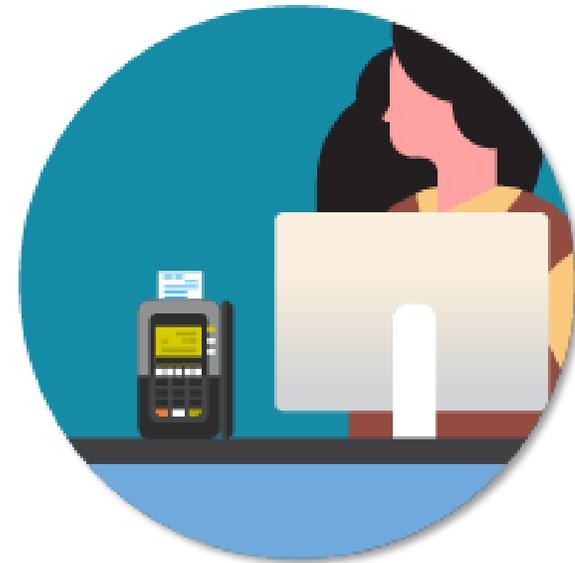
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Cleaning And Disinfecting Your Facility

Electronics

For electronics, such as **tablets**, **touch screens**, **keyboards**, **remote controls**, and **ATM machines**

- Consider putting a **wipeable cover** on electronics.
- Follow manufacturer's instruction for cleaning and disinfecting.
 - If no guidance, **use alcohol-based wipes or sprays containing at least 70% alcohol**. Dry surface thoroughly.



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Cleaning Guide

① Select disinfectants

1. 75% Alcohol
2. 95% Alcohol
3. Glutaraldehyde [C₅H₈O₂],
2% concentration
4. Isopropyl alcohol [(CH₃)₂CHOH],
70% concentration
5. Sodium hypochlorite [NaOCl],
10% concentration



② Follow the instructions from the **User Manual** or **US CDC** to clean the devices

1.3.2 Cleaning and Disinfecting

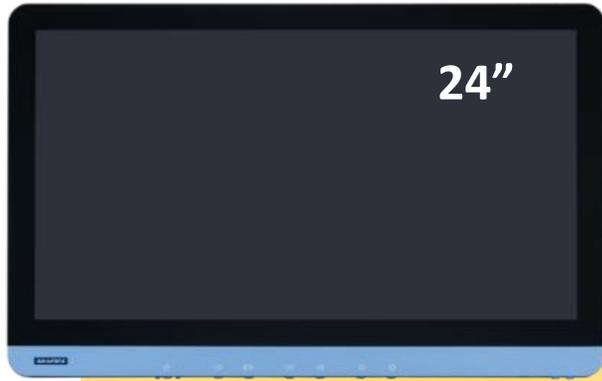
During normal use of the POC (Point-of-Care Terminal) the device may become dirty and should be regularly cleaned.

Steps:

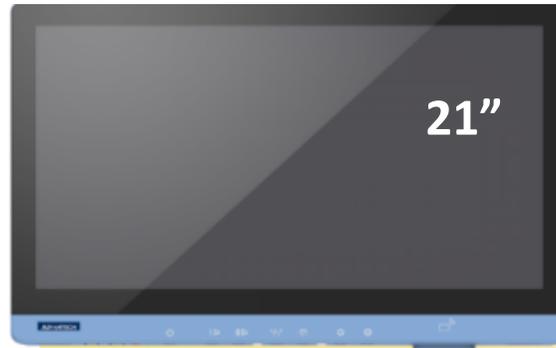
1. Prepare cleaning water.
2. Wipe the POC with a clean cloth that has been moistened in the cleaning solution.
3. Wipe thoroughly with a clean cloth.

- Caution!**
- Do not immerse or rinse the POC or its peripherals. If you accidentally spill liquid on the device, disconnect the unit from the power source. Contact your IT support department regarding the continued safety of the unit before placing it back in operation
 - Do not spray cleaning agent on the chassis.
 - Do not use disinfectants that contain phenol.
 - Do not autoclave or clean the POC or its peripherals with strong aromatic, chlorinated, ketone, ether, or other solvents, sharp tools or abrasives. Never immerse electrical connectors in water or other liquids.

Cleaning Guide – POC Series



POC-624



POC-621



POC-615



Wipe



Spray



Cleaning and Disinfecting – Disinfectants for POC

EPA Suggestion List

List N: Products with Emerging Viral Pathogens AND Human Coronavirus claims for use against SARS-CoV-2
Date Accessed: 04/22/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Types for Use	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
74559-1	Hydrogen peroxide	Accel TB	Virox Technologies Inc	Poliovirus; Feline Calicivirus	1	RTU	Hard nonporous	Healthcare; Institutional; Residential	Yes	03/13/2020
74559-3	Hydrogen peroxide	Accel TB Wipes	Virox Technologies Inc	Poliovirus	1	Wipe	Hard nonporous	Healthcare; Institutional; Residential	Yes	03/13/2020

Accel TB is one of the disinfection agents for Advantech iHealthcare products.

Cleaning and Disinfecting – POC Cleaning Test

Test Standard: Reference ASTM D 4752-03 and in house test method of Advantech

Test Solvent:

1. AHP Accel TB (CAS Number:7722-84-1)
2. 75% Alcohol (CAS Number: 64-17-5)
3. Glutaraldehyde [C₅H₈O₂], 2% concentration (CAS Number:111-30-8)
4. Isopropyl alcohol [(CH₃)₂CHOH], 70% concentration (CAS Number:7681-52-9)
5. Sodium hypochlorite [NaOCl], 10% concentration (CAS Number:2893-78-9)
6. CHLOR-CLEAN-1.7g NaDCC(1000 ppm available chlorine) (CAS Number:2893-78-9)



Advantech test std. ASTM D 4752-03

Advantech std. chemical list:

1. **75% Alcohol**
2. **95% Alcohol**
3. **Glutaraldehyde [C₅H₈O₂],
2% concentration**
4. **Isopropyl alcohol [(CH₃)₂CHOH],
70% concentration**
5. **Sodium hypochlorite [NaOCl],
10% concentration**

Cleaning and Disinfecting – POC Cleaning Test

Photo I: (Rear Cover)

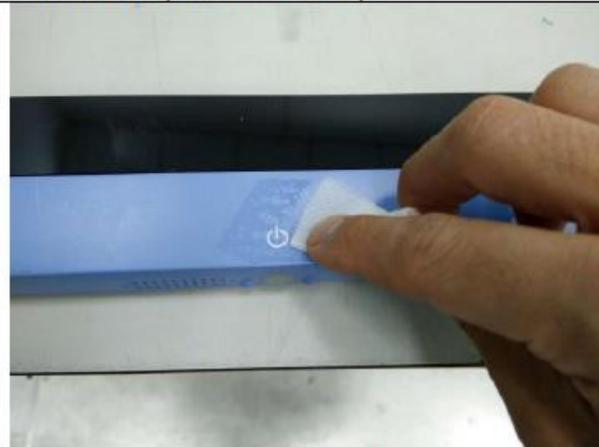


Solvent 1



Solvent 1 after test

Photo II: (Front Cover)



Solvent 1

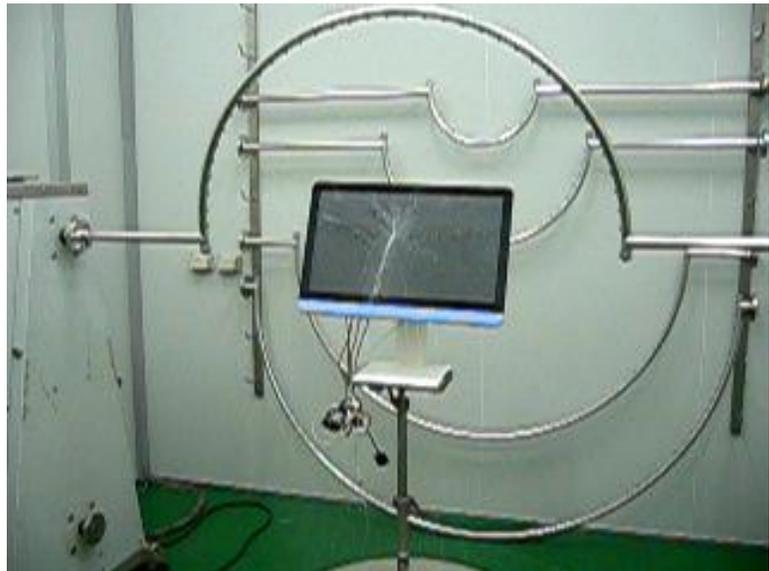


Solvent 1 after test

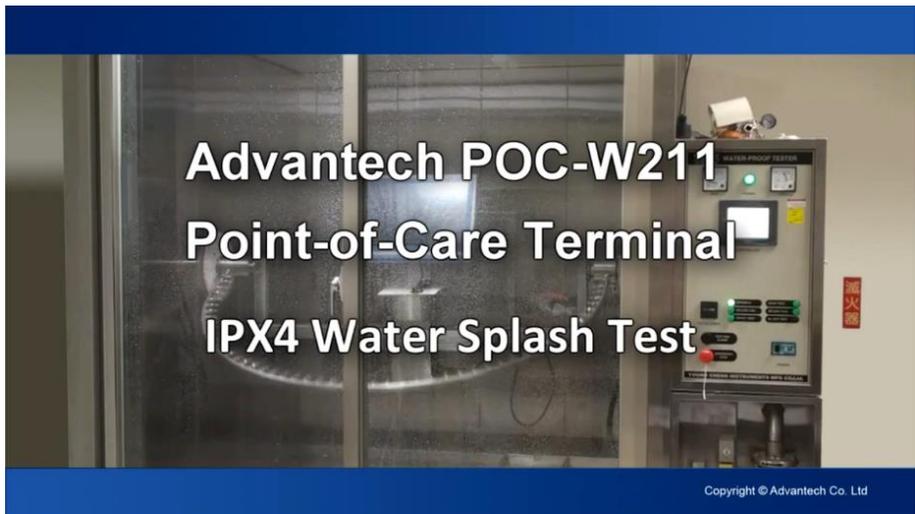
Available for custom disinfection agents.
Customer assigned the special agents test

1. **AHP Accel TB**
2. **CHLOR-CLEAN (1.7g NaDCC)**
3. **Schülke Perform**
4. **Acrylan**
5. **Descocid – N**

Cleaning and Disinfecting - IP54 Rating



21" and 24" POC IP54 Testing Video



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Reliability Laboratory

TEST REPORT

Report No.: HC20131/2014
Page: 1 of 6
Date: February 26, 2014

ADVANTECH CO., LTD.
NO. 33, LANE 365, YANG GUANG STREET,
NEIHU DISTRICT, TAIPEI, TAIWAN, R.O.C.

The following merchandise was submitted and identified by the vendor as:

<u>Product Description:</u>	Medical computer
<u>Style/ Item No.:</u>	POC-W242/ No.1
<u>Quantity:</u>	Total 1 set
<u>Testing Period:</u>	Feb. 24, 2014 to Feb. 26, 2014

We have tested the submitted sample(s) as requested and the following results were obtained:

Test Required:

Test for Degrees of Protection Provided by Enclosures (IEC 60529 Edition 2.1: 2001)

IP Code	IP54
First characteristic numeral	Degrees of protection against access to hazardous parts and against solid foreign objects
Second characteristic numeral	Degrees of protection against ingress of water

Test Results:

Conclusion
Submittals sample(s) comply with the requirement and acceptance conditions of IEC 60529 Edition 2.1: 2001 Degrees of Protection Provided by Enclosures -- IP54. The detailed description of test result, please see attached sheet(s).

Signed for and on behalf of
SGS TAIWAN Ltd.

Winson Tseng

Winson Tseng
Asst. Manager

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有註明，此報告中所有測試之樣品與測試之結果僅供參考，且僅限於報告發出之日起九十日內有效。此報告不得重印或轉錄，除非獲得本公司之書面許可。
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No.134, Wu Kung Road, New Taipei Industrial Park, WuKu District, New Taipei City, Taiwan 新北市 中和區 吳厝港路134號
台灣檢驗科技股份有限公司 | (886-2) 2299-3279 | f (886-2) 2299-9558 | www.tsg.com.tw | Member of SGS Group

Cleaning and Disinfecting - IP54 Rating

Test Result:

A. Degrees of protection against access to hazardous parts and against solid foreign objects (IP5X)

A-1 Test for protection against access to hazardous parts (IP5X)

Test Result		
Check Item		Style/ Item No.
		POC-W242/ No.1
1	Does the test wire penetrate any openings of the enclosure?	No
2	(followed check item 1) If the test wire penetrates any openings of the enclosure, does the test wire touch any hazardous live parts or any hazardous mechanical parts?	N/A
3	(followed check item 2) Does adequate clearance be kept between the test wire and hazardous live parts or hazardous mechanical parts?	N/A
Note 1: N/A means "Not Applicable". Note 2: The check items in this test report for inspecting the degree of protection provided by enclosures are reference to the requirements specified in IEC 60529 Edition 2.1: 2001 and in accordance with the acceptance conditions specified by client.		

A-2 Test for protection against solid foreign objects (IP5X)

Test Result		
Check Item		Style/ Item No.
		POC-W242/ No.1
1	Does any dust deposit inside the enclosure?	Yes (see photo 4)
Note 1: N/A means "Not Applicable". Note 2: The check items in this test report for inspecting the degree of protection provided by enclosures are reference to the requirements specified in IEC 60529 Edition 2.1: 2001 and in accordance with the acceptance conditions specified by client.		

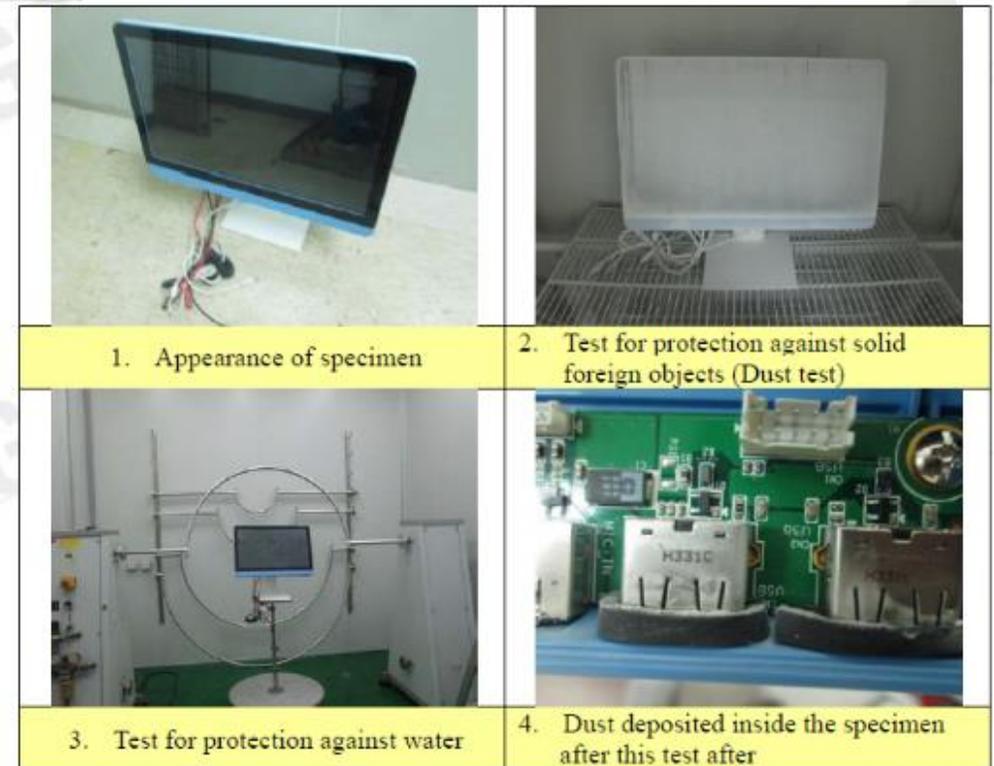
Cleaning and Disinfecting - IP54 Rating

Test Result--Continued:

B. Degree of protection against ingress of water (IPX4)

Test Result		Style/ Item No.
Check Item		POC-W242/ No.1
1	Does any water permeate into the specimen?	No
2	(followed check item 1) If any water has entered, does the water accumulate near the cable end or live parts?	N/A
2.1	(followed check item 2) Does the water be sufficient to interfere with the correct operation of the equipment or impair safety?	N/A
2.2	(followed check item 2.1) Does the water deposit on insulation parts where it could lead to tracking along the creep age distances?	N/A
2.3	(followed check item 2.2) Does the water reach live parts or windings not designed to operate when wet?	N/A
<p>Note 1: N/A means "Not Applicable".</p> <p>Note 2: The check items in this test report for inspecting the degree of protection provided by enclosures are reference to the requirements specified in IEC 60529 Edition 2.1: 2001 and in accordance with the acceptance conditions specified by client.</p>		

Test Photos:



No water and dust is inside the computer system after the test

Co-Creating the Future of the IoT World

