

# Install & Remove ARP-55xxAX, ARP-3821AX HMI In Hazardous Location

For North America (USA and Canada)

### General

Panel Computer Models ARP-55xxAP, where xx may be "15", "17", "19" **and ARP-3821AX is** "21" for Use in Class I, Division 2, Groups A, B, C, and D, or Non-Hazardous Locations.

#### **ELECTRICAL RATINGS:**

Power Input: 24 VDC, 3.8 A

Maximum Ambient Temperature: 50°C Temperature Code (T-Code) of T4A

**NOTE:** Before installing or using this product in hazardous locations, confirm that the Hazardous Location labeling appears on the product labeling. Always use your product in conformance with the product labeling and this instruction.

WARNING - EXPLOSION HAZARD – Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous. AVERTISSEMENT - RISQUE D'EXPLOSION - NE PAS DÉBRANCHER À MOINS QUE L'ALIMENTATION N'AIT ÉTÉ COUPÉE OU QUE L'EMPLACEMENT NE SOIT EXEMPT DE CONCENTRATIONS INFLAMMABLES.

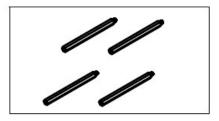
WARNING - EXPLOSION HAZARD – Substitution of any components may impair suitability for Class I, Division 2. AVERTISSEMENT - RISQUE D'EXPLOSION - REMPLACEMENT DE COMPOSANTS PEUT COMPROMETTRE LA SÉCURITÉ POUR Class I, Division 2

WARNING - EXPLOSION HAZARD – The area must be known to be non-hazardous before servicing/replacing the unit and before installing. AVERTISSEMENT - RISQUE D'EXPLOSION - La zone doit être connue pour être non dangereuse avant d'effectuer l'entretien / le remplacement de l'unité et avant l'installation.

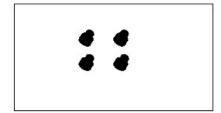
WARNING –EXPLOSION HAZARD – "The USB connectors are for temporary connection only. Do not use, connect, or disconnect unless area is known to be non-hazardous. Connection or disconnection in an explosive atmosphere could result in an explosion." AVERTISSEMENT - RISQUE D'EXPLOSION - Les connecteurs USB sont uniquement destinés à une connexion temporaire. Ne pas utiliser, connecter ou déconnecter à moins que la zone ne présente aucun danger. La connexion ou la déconnexion dans une atmosphère explosive peut provoquer une explosion



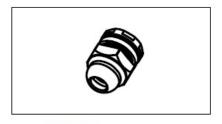
The following parts are shipped with the unit (ARP-55xxAX, ARP-3821AX C1D2 version) to be installed on the unit.



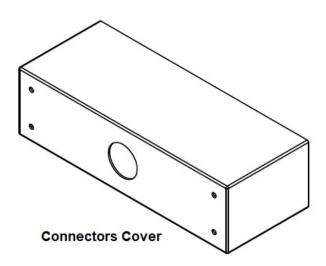
4-STANDOFF HEX M3\*65.5+4.5 D=5MM



M3\*4

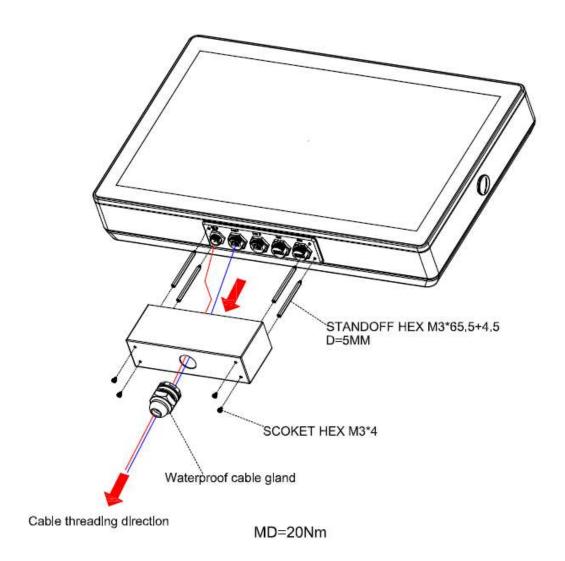


M25x1.5 cable gland



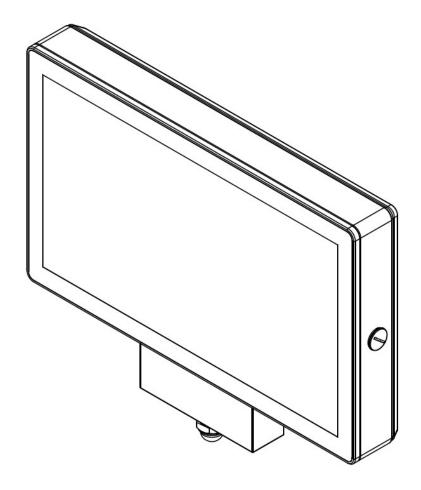


# **Cover Installation**





# **APR-3821AX** with connectors cover installed





## **A WARNING**

## **EXPLOSION HAZARD**

- Do not use this product in hazardous environments or locations other than Class I, Division 2, Groups A, B, C, and D.
- Substitution of any components may impair suitability for Class I, Division 2.
- To apply or remove the supply power from this product installed in a Class I, Division 2 hazardous location, you must either: A) Use a switch located outside the hazardous environment, or B) Use a switch certified for Class I, Division 1 operation inside the hazardous area.
- Do not connect or disconnect equipment unless power has been switched off or the area is known to be non-hazardous. This applies to all connections including power, ground, serial, parallel, and network connections.
- Do not install any components, equipment, or accessories unless these have also been qualified as suitable for use in Class I, Division 2, Groups A, B, C, and D locations.
- Never use unshielded/ungrounded cables in hazardous locations.
- Use only non-incendive USB devices.
- Do not attempt to install, operate, modify, maintain, service, or otherwise alter this product except as permitted in this manual. Unpermitted actions may impair the suitability of this product for Class I, Division 2 operation.

In a Class 1 Division 2 environment, electrostatic discharge (ESD) is a significant safety concern as it can potentially ignite flammable gases or vapors present in the area, even if only in small concentrations, due to the potential for a spark from the discharge; therefore, proper grounding and bonding practices are crucial to prevent ESD build-up and mitigate the risk of ignition.

**Grounding and bonding:** Connecting all equipment and personnel to a common ground point to prevent static electricity accumulation.

**Conductive materials:** Using conductive flooring, work surfaces, and clothing to facilitate static dissipation.

**Static dissipative tools:** Employing tools and equipment designed to dissipate static electricity safely.

**lonizing equipment:** Utilizing air ionizers to neutralize static charges

## Important considerations:

Always wear appropriate personal protective equipment (PPE) when working in a Class 1 Div 2 area, including flame-resistant clothing, gloves, and safety eyewear. If you are not experienced in working within hazardous locations, consult with a qualified electrician or technician to assist with the HMI removal.



To safely remove an HMI in a Class 1 Division 2 area, follow the procedures below to disconnect HMI:

## 1. Isolate power:

- Locate the main power source for the HMI and completely shut off the power supply.
- Verify the power is off and completely de-energized using a suitable voltage tester.
- Disconnect DC cable terminal from power source.

## 2. Remove HMI:

- Loosen the mounting screw which is securing the HMI to its mounting bracket. Please refer to the drawing below
- Remove the HMI from the mounting support bracket
- Do not forcefully pull on cables to avoid damage or potential sparking if the cables connected to the HMI needs to be removed in Class 1 Division 2 location.