# Rugged Touch Panel PC

## INSTALLATION GUIDE



| ITEM# | H1400811-8.4R |
|---|---|
| | H1400811-15R |
| | TOUCH 1500-EX |
| | NGC-UIT3-EX |
| | R9075-8.4 |
| | R9075-15 |

# Warnings and Cautions

Prior to beginning the installation, carefully read, understand, and follow all related safety guidelines and documentation. This manual includes warnings, recommendations, and safety precautions that must be observed.

When so labeled, this equipment is suitable for use in

- Class I Division 2, Groups A, B, C and D

- ATEX / IECEx Zone 2

- non-hazardous locations

| WARNING | AVERTISSEMENT |
|---|---|
| There are no non-incendive circuits or non-incendive field wiring within or associated with the unit. | Il n'y a pas de circuits non incendiaires ni de câbles de terrain non incendiaires à l'intérieur ou associés avec léquipment |
| Do not disassemble the system - no user-serviceable parts inside. | Ne pas démontez le système - aucune pièce interne ne peut être réparée par l'utilisateur |
| Only technically qualified service personnel are permitted to install or service the equipment. | Seul le personnel qualifié est autorisé à installer ou à entretenir l'équipement. |
| Do not operate the system if it has been damaged | N'utilisez pas l'équipement s'il a été endommagé |
| EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS. | RISQUE D'EXPLOSION - NE PAS DEBRANCHER TANT QUE LE CIRCUIT EST SOUS TENSION, A MOINS QU'IL NE S'AGISSE D'UN EMPLACEMENT NON DANGEREUX |

# Conditions of Safe Use

The equipment must be installed in a low risk mechanical danger environment.

The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC/EN 60664-1

The equipment shall be installed in a back enclosure with tool removable door or cover that provides a degree of protection not less than IP54 in accordance with IEC/EN 60079-0 rated for

- Internal and external ambient of: -40°C to +60°C

- ATEX / IECEx: Zone 2 or better

- US / CAN: Class I Div 2 or better

Provisions shall be made external to the equipment to provide transient protection at a level not exceeding 140% at the power supply terminals

# Product Overview

Intel ATOM E3845 processor
8GB DDR3 SDRAM
64GB CFast Flash Storage


| 15" LCD with LED backlight | 8.4" LCD with LED backlight |
| 400 nit typical | 400 nit typical |
| 1024 x 768 Resolution | 800 x 600 Resolution |

5-wire Resistive Touchscreen Glass-Film-Glass

3x 10/100/1000 BaseT Ethernet
4x USB 2.0 Ports

2x Isolated RS-485 Ports
2x RS-232 Port
4x Open-Collector Outputs (30V max)

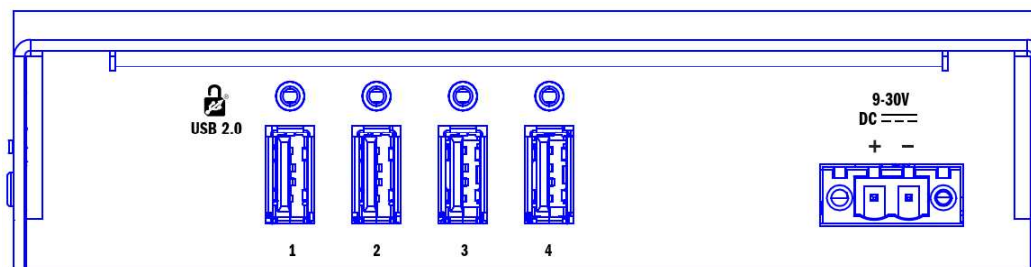Windows 10 IoT ENT 64-bit

# Specifications

## WEIGHT

8.4" model  5.6 lb
15" model  16 lb

## POWER

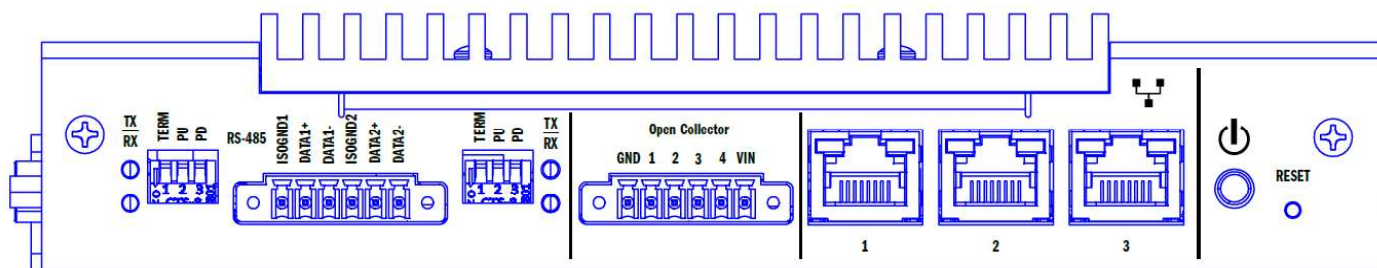| 8.4" model | 15" model |
|---|---|
| 12 – 27VDC 3A– 1.1A respectively | 12 – 27VDC 4A– 1.5A respectively |
| 30W max / 15W nominal | 40W max / 25W nominal |

Power source must be appropriately Listed ITE Power Supply Limited Power Source, or LPS, suitable for the maximum ambient temperature at the installation



**Connector**
**Manufacturer:**  MOLEX
**Part Number:**  39536-4002
**Description:**  2 Position Right Angle 5.08mm Header
**Mates with:**  MOLEX 39534-0002 2-Position 5.08mm Pluggable Screw Terminal
**Screw Torque:**  5.5 in lbs (0.62 Nm)
**Wire gauge**:  AWG 16-20 (1.31mm$^2$ – 0.52mm$^2$)
**Wire rating**:  85°C or higher

## RS-485 & OPEN COLLECTOR (DIGITAL OUTPUTS)



**Connector**
**Manufacturer:**  MOLEX
**Part Number:**  39506-1006
**Description:**  6 Position Right Angle 3.5mm Header
**Mates with:**  MOLEX 39504-0006 6-Position 3.5mm Pluggable Screw Terminal
**Screw Torque:**  5.5 in lbs (0.62 Nm)
**Wire gauge**:  AWG 16-30 (1.31mm$^2$ – 0.05mm$^2$)
**Wire rating**:  85°C or higher

## ENVIRONMENTAL SPECIFICATIONS

| Specification | Operating | Storage |
|---|---|---|
| Temperature Range | -40ºC ≤ Ta ≤ 60ºC | -40ºC to 80ºC |
| Humidity Range | 10 to 90% R.H. Non-Condensing | 10 to 90% R.H. Non-Condensing |

## CERTIFICATIONS / APPROVALS

- NEMA 4X, IP65 protection on front panel
- FCC Part15 Subpart B/ICES 003 Class A
- Conforms to UL 62368-1, 2nd Ed, 2014-12-01; CAN/CSA C22.2 No. 62368-1-14, 2nd Ed, Issued: 2014-12-01; UL 60950-1, 2nd Edition, 2019-05-09 ; CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10
- CE marking
  - ATEX Directive (2014/34/EU)
  - EN 60079-0:2017
  - EN 60079-11:2012
  - EN 60079-7: 2015 +A1:2018
- IECEx
  - IEC 60079-0 2017
  - IEC 60079-11 2012
  - IEC 60079-7, 5.1 Ed

## CLASSIFICATION/MARKING

This equipment is suitable only for the locations with classification specified on the product nameplate, specifically:
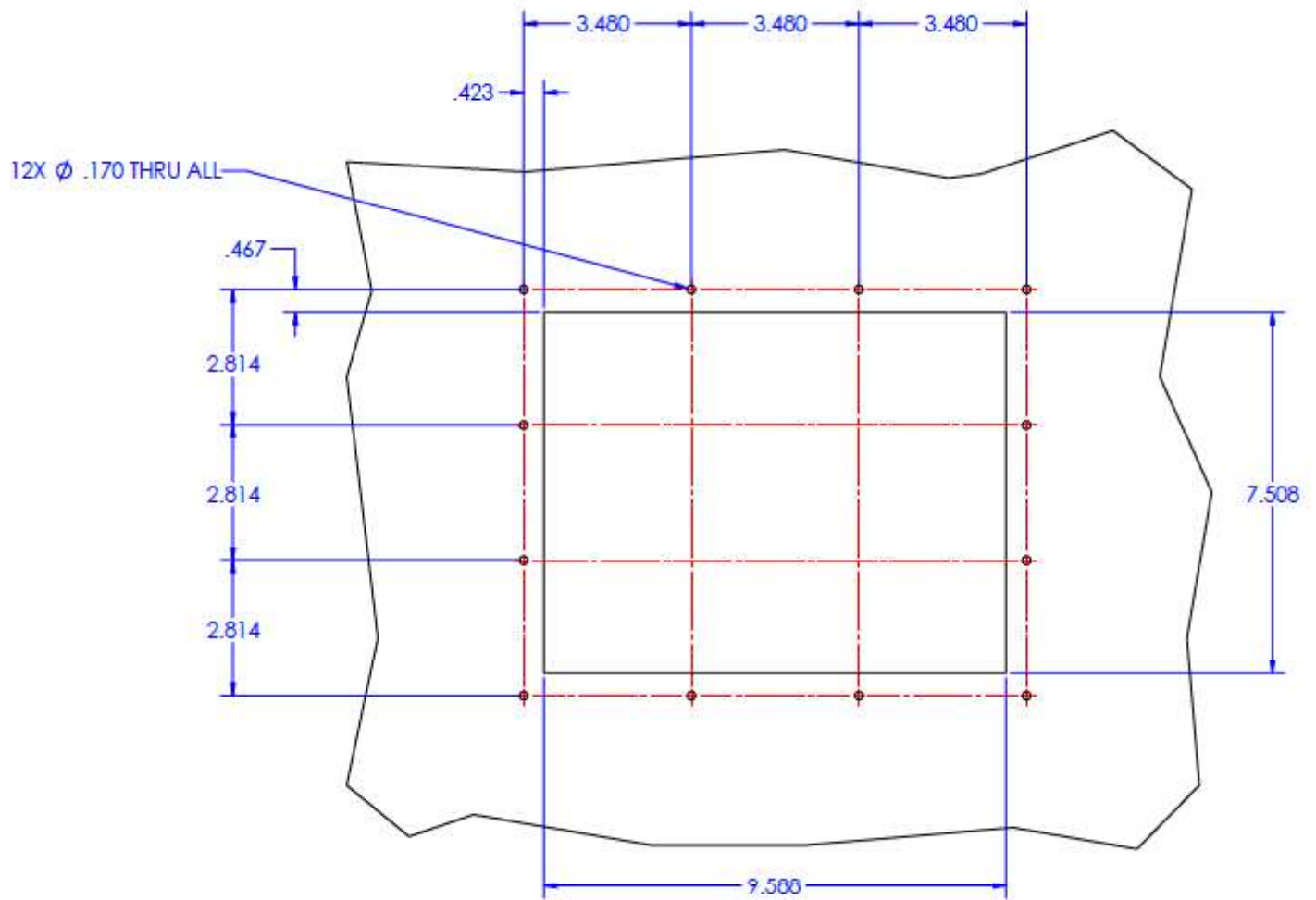
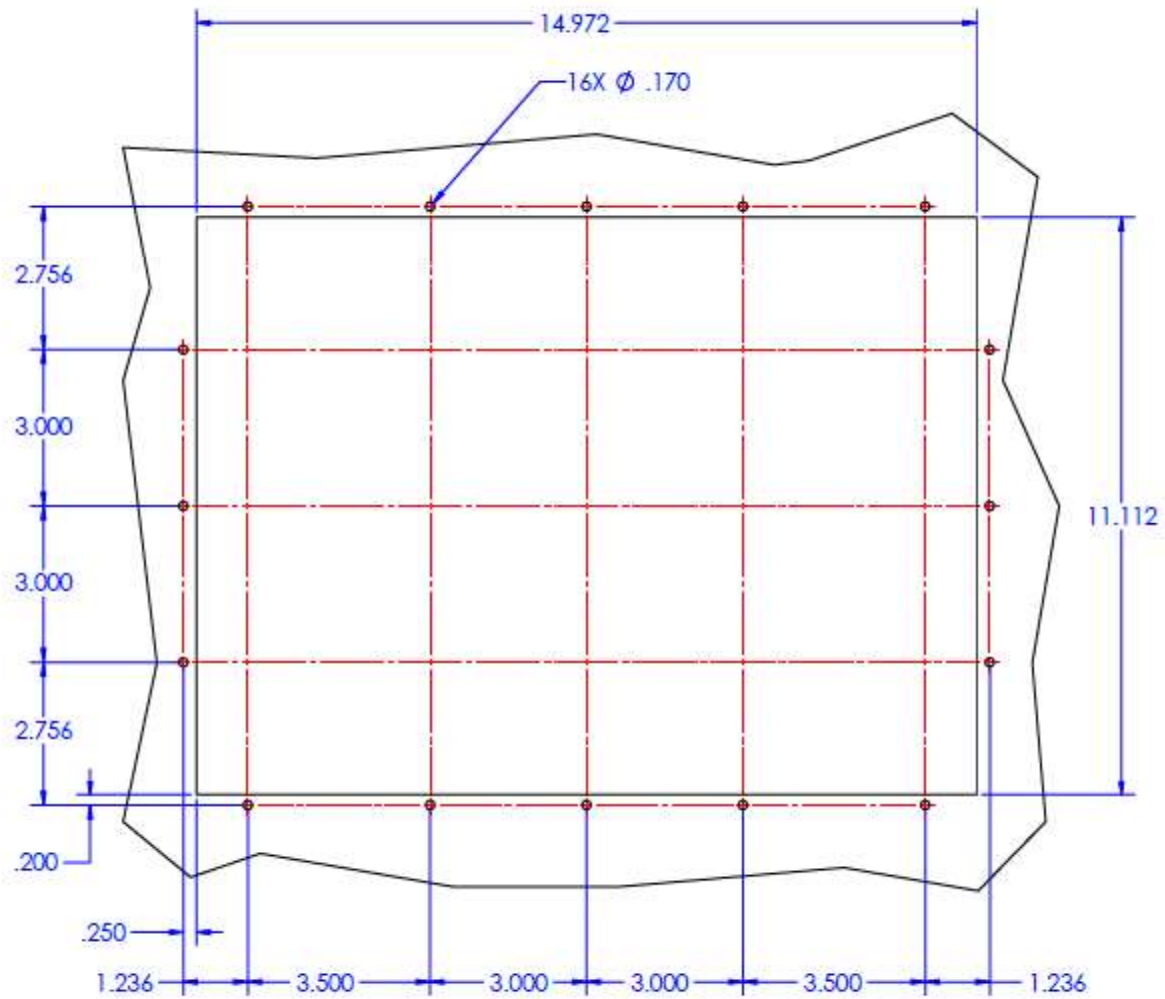| 8.4" model | 15" model |
|---|---|
| Non-hazardous | |
| CE ⟨Ex⟩ II 3 G Ex ic ec IIC T5 Gc | CE ⟨Ex⟩ II 3G Ex ic ec IIC T4 Gc |
| Class I Div. 2 Groups A, B, C, D T5 | Class I Div. 2 Groups A, B, C, D T4 |

# Installation

- Use appropriately Listed ITE Power Supply Limited Power Source, or LPS . Follow all applicable wiring codes and regulations.
- Do not connect/disconnect equipment unless power has been switched off or the area is known to be non-hazardous.
- Peripheral equipment must be suitable for the location in which it is used.
- This equipment must be installed in a low risk mechanical danger environment.
- This equipment must be installed in accordance with Conditions Of Safe Use section of this guide
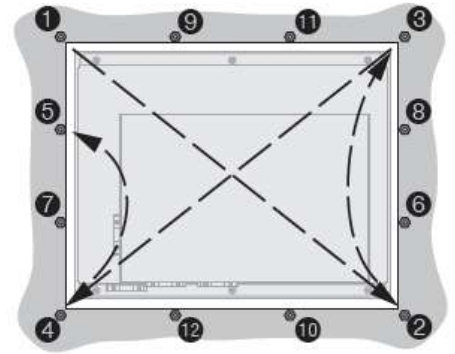
## PANEL CUT OUT

- 8.4"
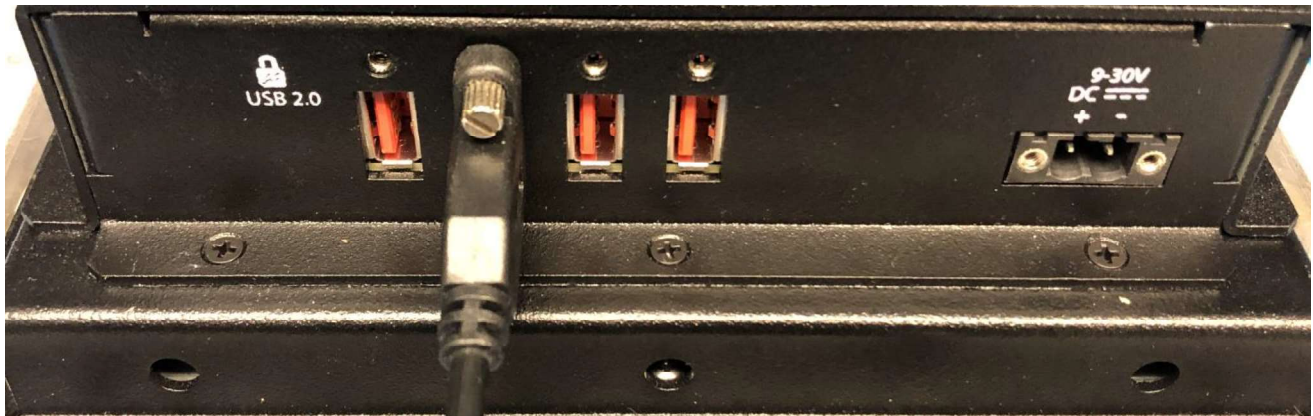
- 15"

## MOUNTING INSTRUCTIONS

- Place the HazPAC Panel PC in position to align the mounting studs with the corresponding holes on the panel mounting late.
- Use the supplied 6/32" KEPS nuts to secure the unit to the panel mounting plate. Fasten only hand tight.
- After the display is properly positioned, tighten the KEPS nuts with a torque wrench to the specified values in the sequence pictured below.
- Do not overtighten. Repeat the sequence to ensure proper torque values are retained.

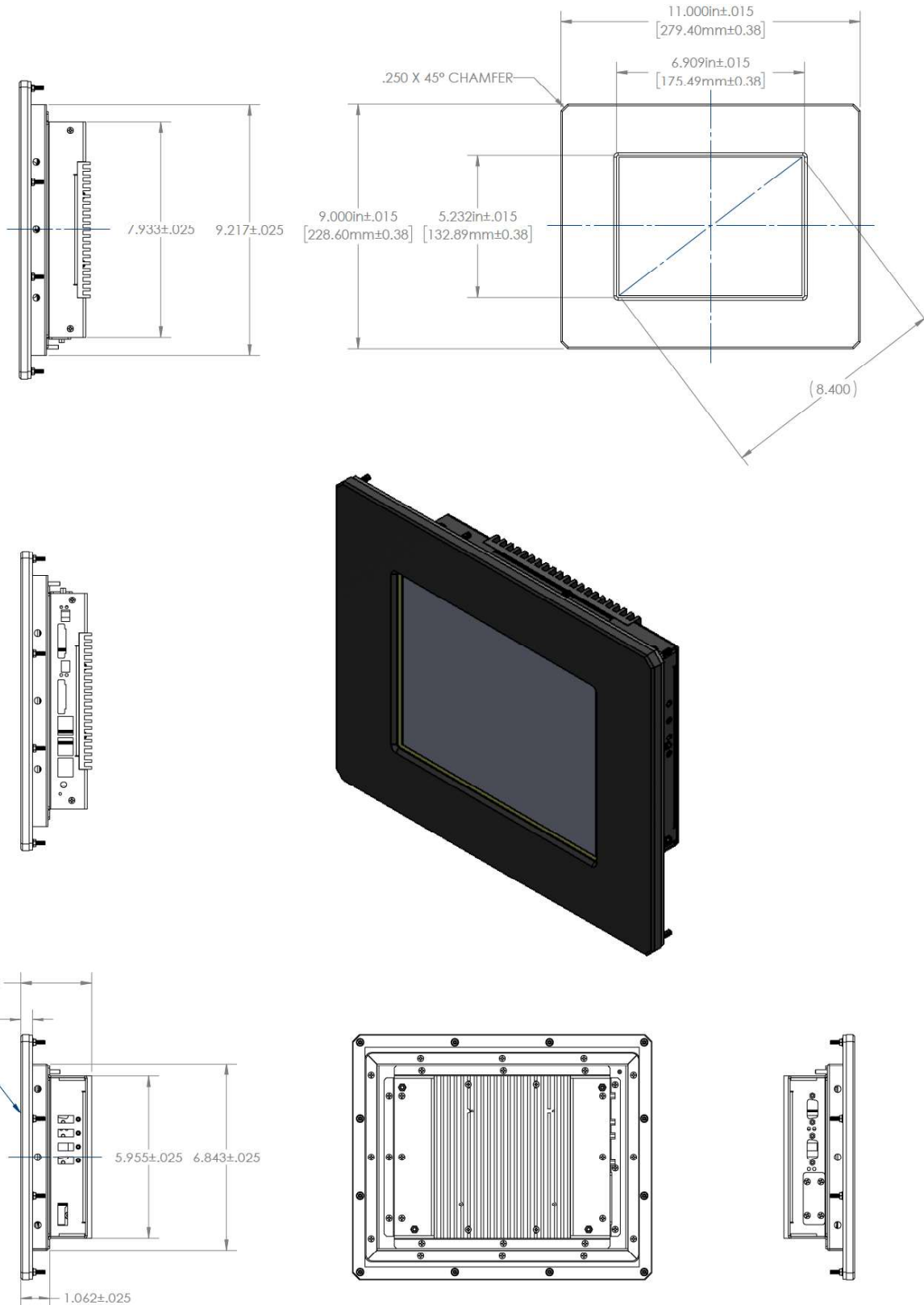| TORQUE | SETTINGS | |
|--------|----------|------|
| 8.4" | 5 in/lb | 0.56 Nm |
| 15" | 10 in/lb | 1.13 Nm |



## CABLE CONNECTIONS

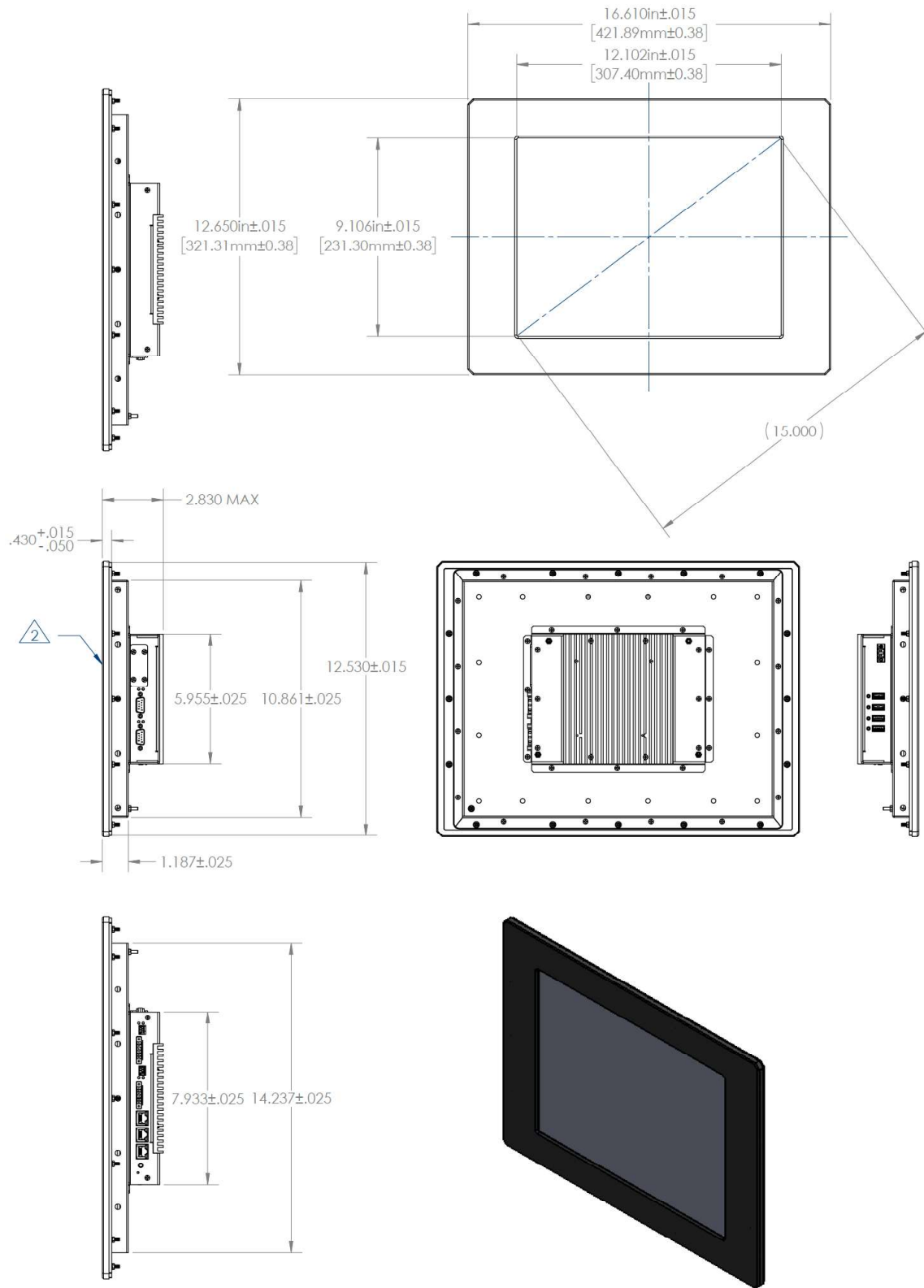- Power input, USB, Open Collector digital outputs, RS-485 and DB9 ports feature screw holes to achieve a secure connector attachment. Cables with matching screws must be utilized during installation to maintain hazardous location certifications. USB ports require proprietary cables equipped with thumb screws supplied by Sealevel (as shown in the picture below). Refer to Optional Items section of the User Manual for more details.

# CAD Drawing – 8.4" model

11.000in±.015
[279.40mm±0.38]

6.909in±.015
[175.49mm±0.38]

.250 X 45° CHAMFER

7.933±.025    9.217±.025

9.000in±.015      5.232in±.015
[228.60mm±0.38]  [132.89mm±0.38]

(8.400)

2.650 MAX

.430 +.015 -.050

5.955±.025    6.843±.025

1.062±.025

# CAD Drawing – 15" model



16.610in±.015
[421.89mm±0.38]

12.102in±.015
[307.40mm±0.38]

12.650in±.015
[321.31mm±0.38]

9.106in±.015
[231.30mm±0.38]

(15.000)

2.830 MAX

.430 +.015 -.050

12.530±.015

5.955±.025    10.861±.025

1.187±.025

7.933±.025    14.237±.025

# How to Get Assistance

When calling for technical assistance, please have the device installed and ready to run diagnostics. If possible, have your user manual and current settings ready.

The Sealevel website is an excellent resource located at www.sealevel.com. The most current software updates and user manuals are available via our homepage by clicking on the 'Drivers' or 'Manuals' links located under 'Technical Support.' Manuals and software can also be downloaded from the product page for your device.

The FAQ section of our website answers many common questions. Refer to this helpful resource by visiting www.sealevel.com/faq.asp.

## TECHNICAL SUPPORT

**Sealevel Systems, Inc.**
PO Box 830
2779 Greenville Highway
Liberty, SC 29657 USA

Monday – Friday
8:00 am to 5:00 pm EST
Phone:  +1 (864) 843-4343
Email:  support@sealevel.com

**RETURN AUTHORIZATION MUST BE OBTAINED FROM SEALEVEL SYSTEMS BEFORE RETURNED MERCHANDISE WILL BE ACCEPTED. AUTHORIZATION CAN BE OBTAINED BY CALLING SEALEVEL SYSTEMS AND REQUESTING A RETURN MERCHANDISE AUTHORIZATION (RMA) NUMBER.**