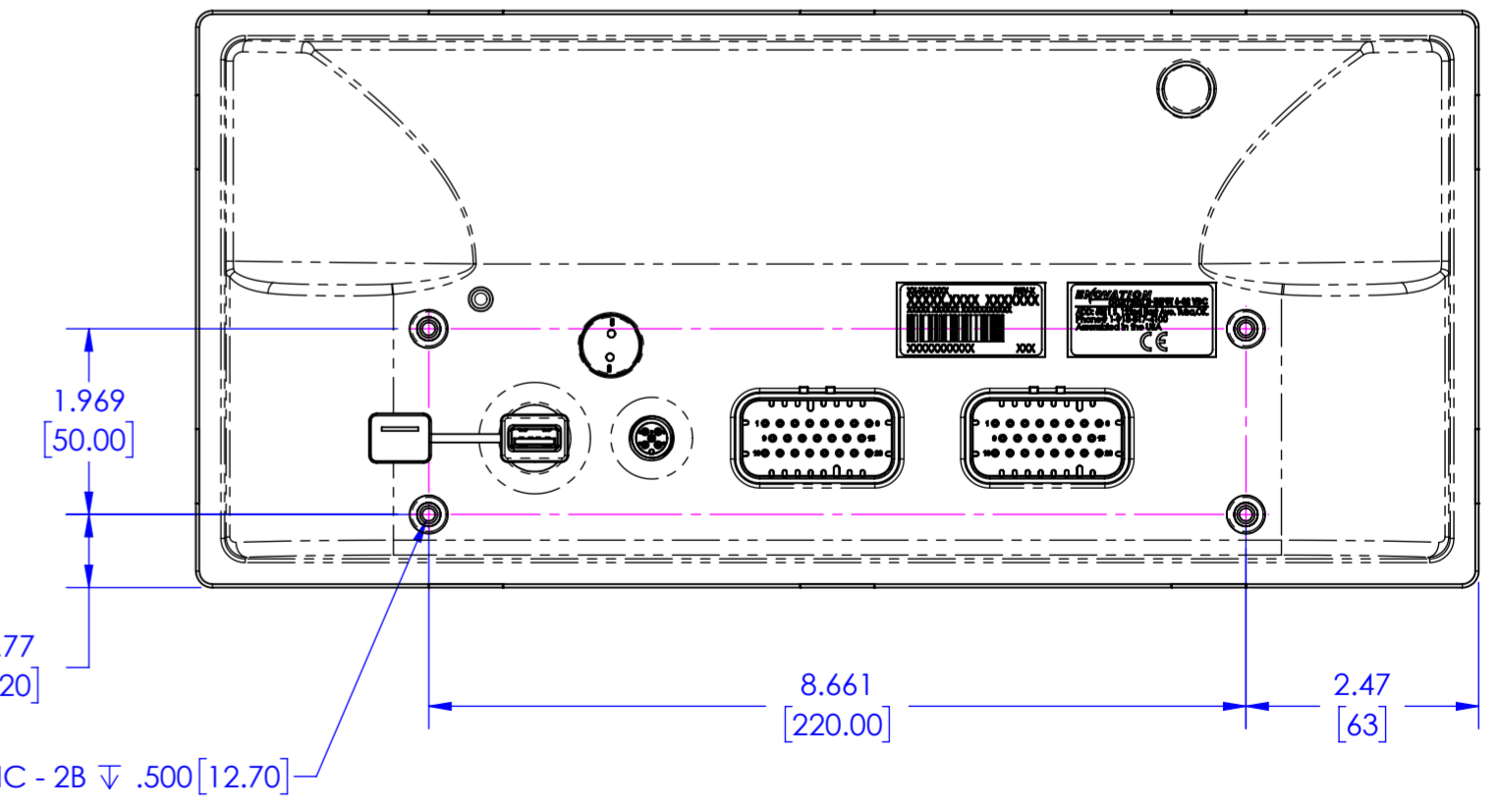
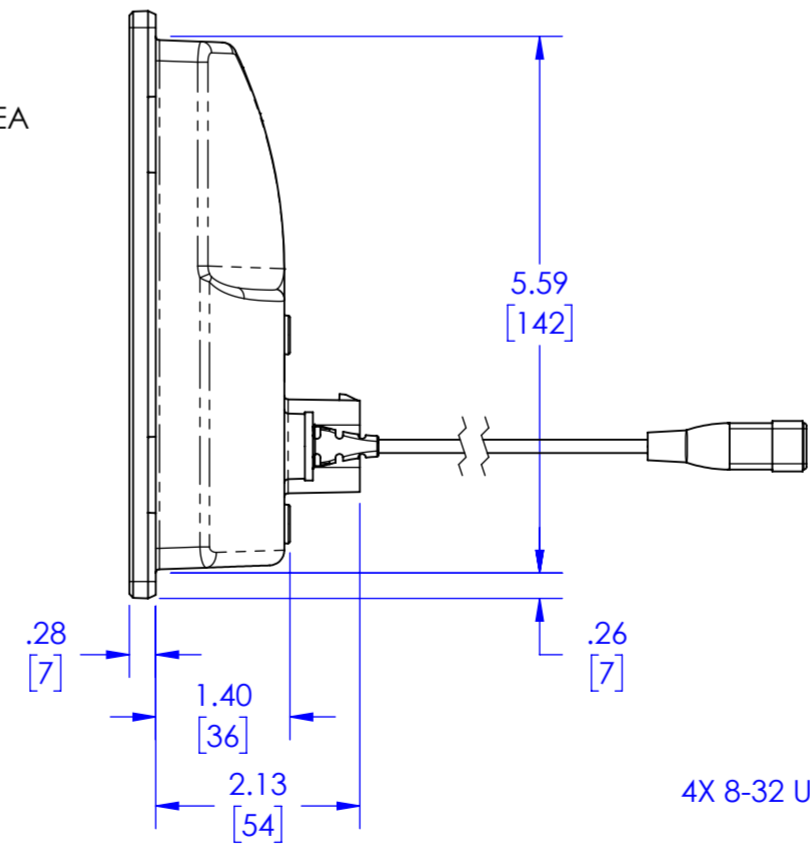
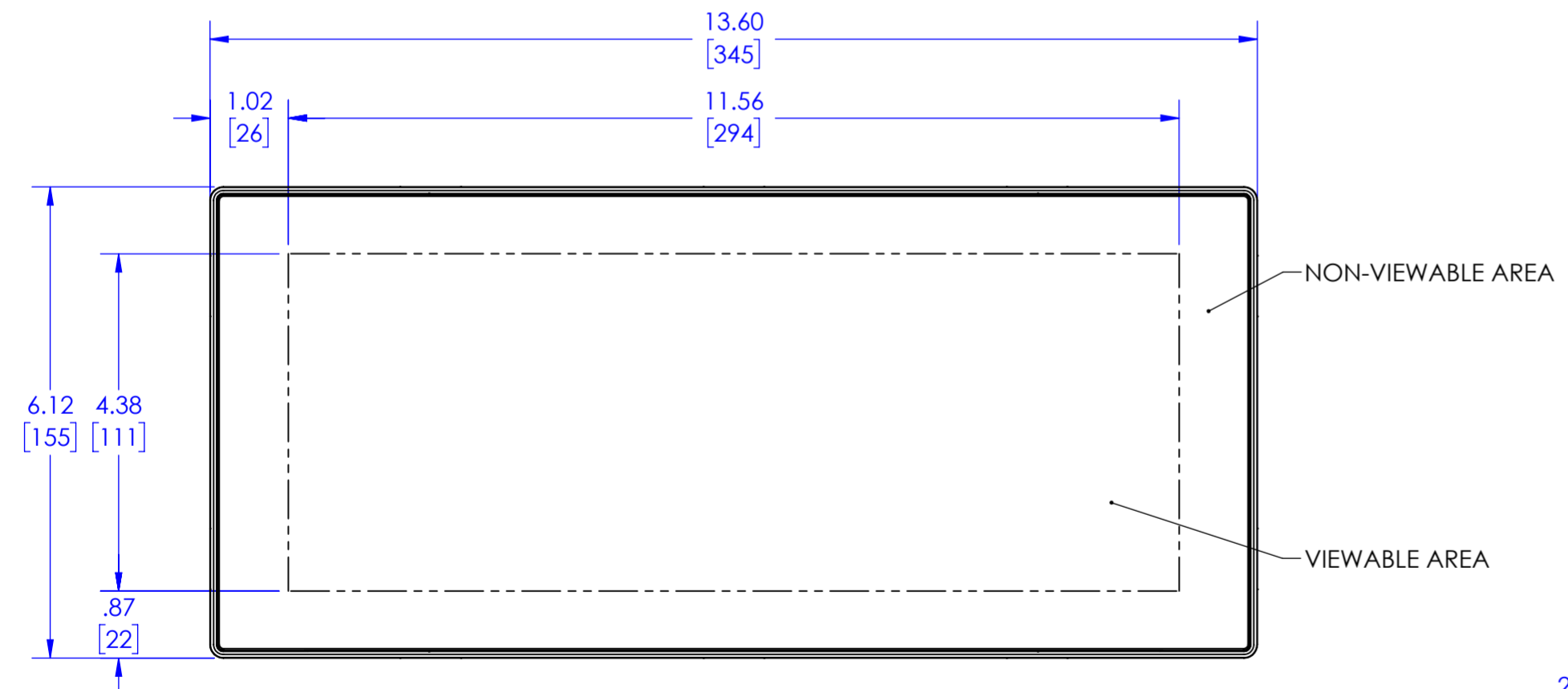
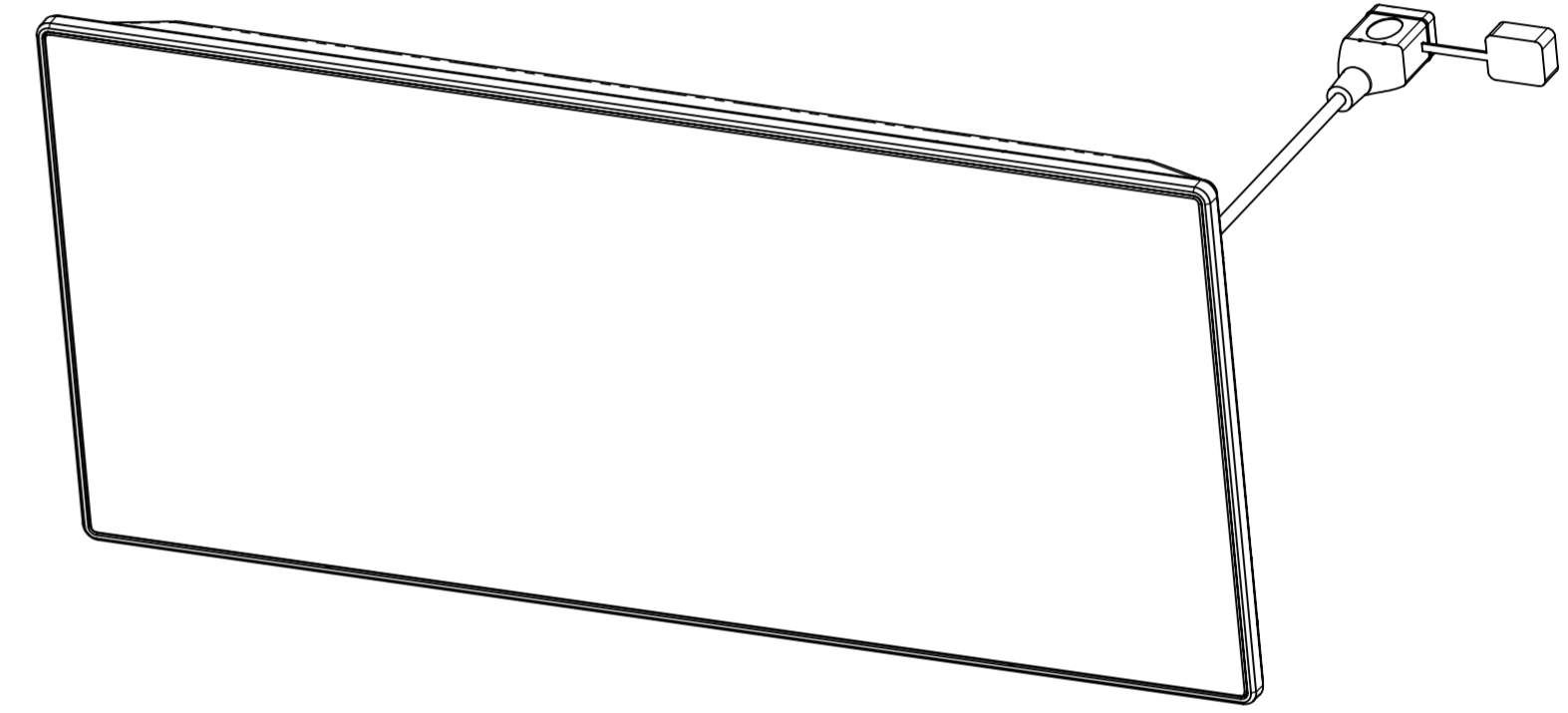
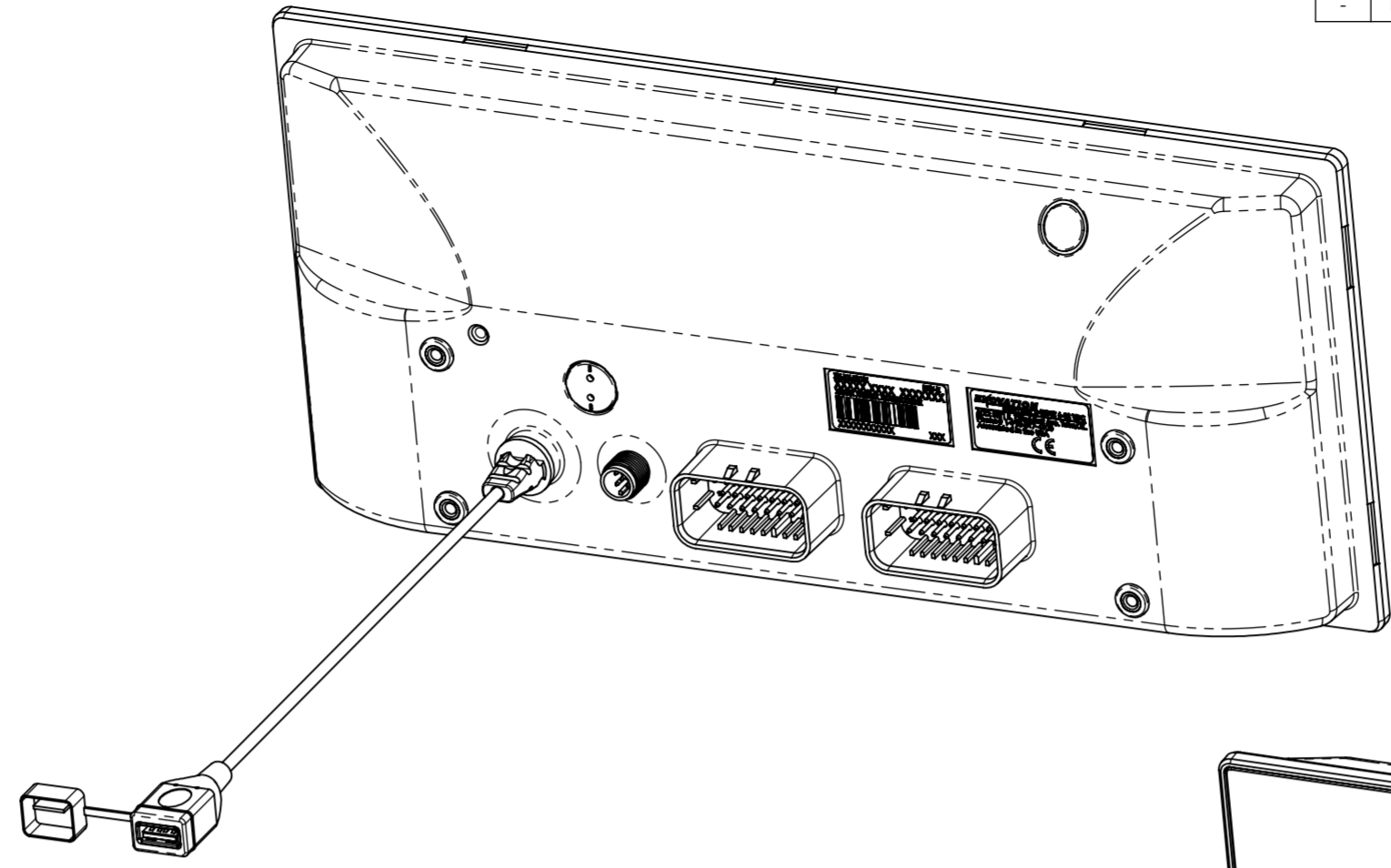
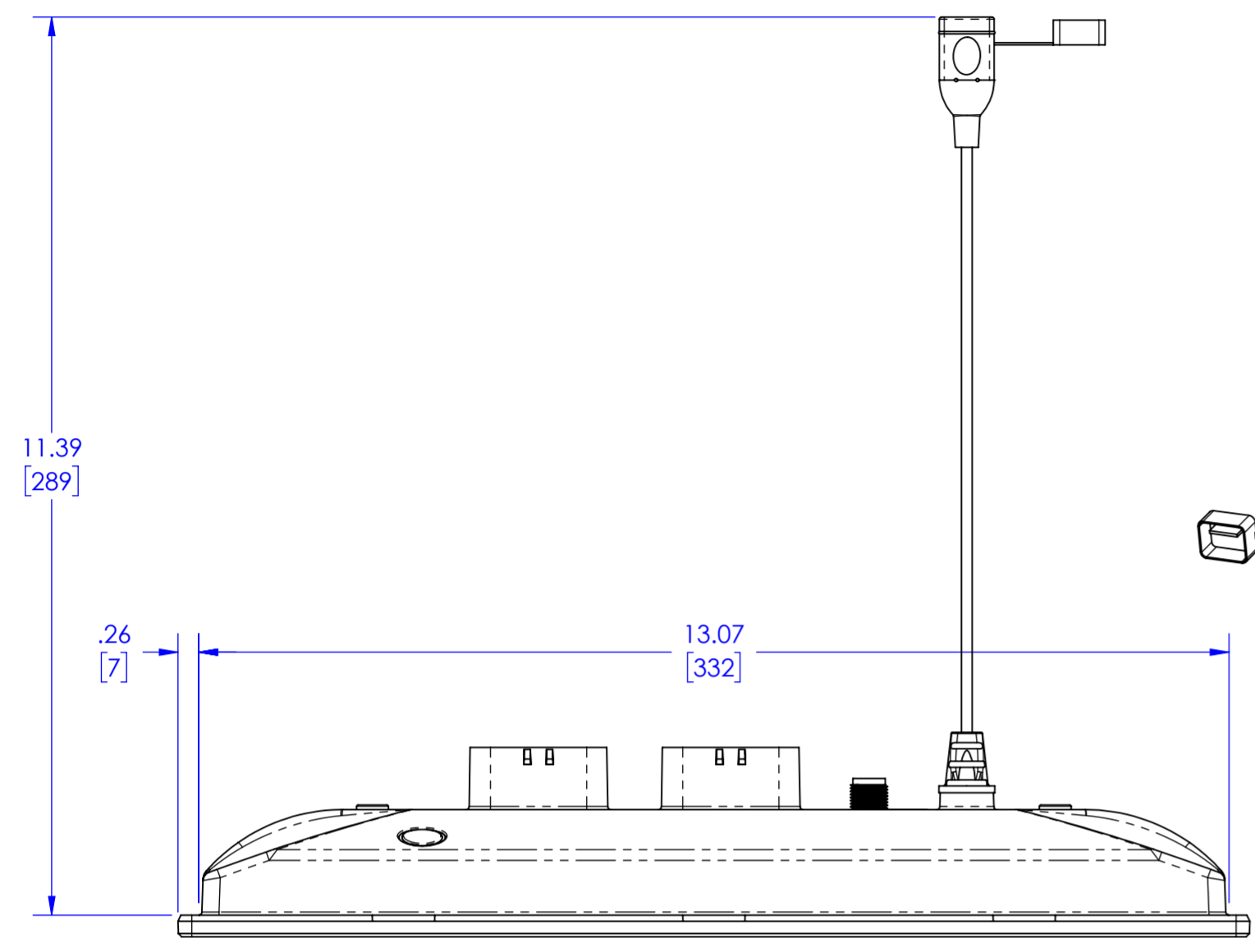


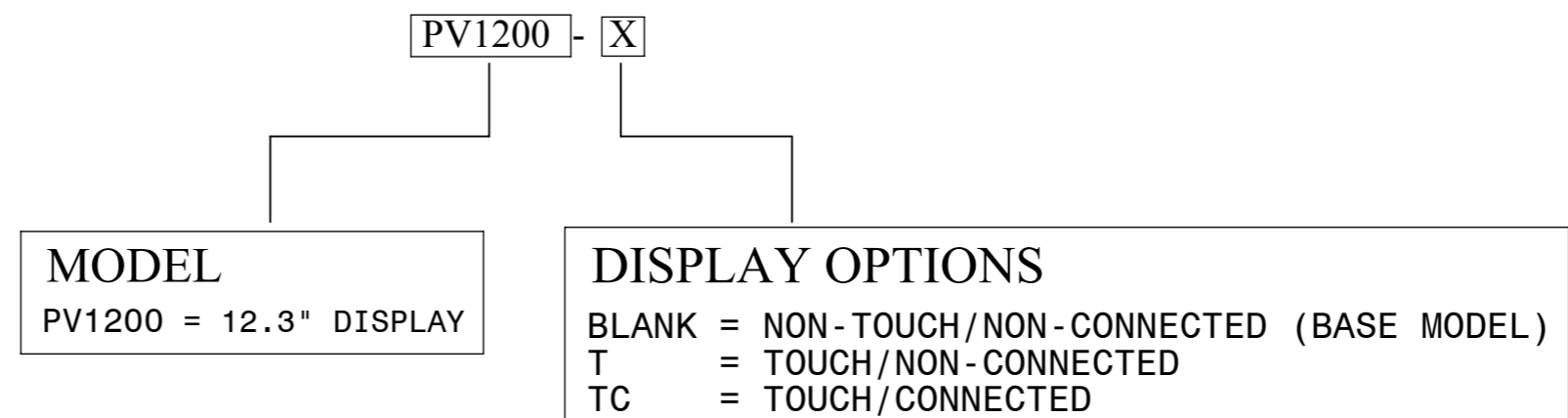
ZONE		REV.	ECO#	DESCRIPTION	DATE (YYYY.MM.DD)	
		-	A-	C01917	INITIAL PRODUCTION RELEASE	2018.01.24
		-	B-	C02428	CHANGED OPERATING TEMPERATURE, STORAGE TEMPERATURE & VIBRATION SPEC. ON SHEET 2	2018.07.31



- NOTES:
1. ALL DIMENSIONS ARE FOR REFERENCE ONLY.
  2. SEE SHEET 4 FOR PANEL CUTOUT DIMENSIONS.
  3. SEE SHEET 3 FOR PIN-OUTS.
  4. SEE SHEET 2 FOR PRODUCTION SPECIFICATIONS.
  5. MOUNTING BRACKET AND HARDWARE KIT AVAILABLE.

UNLESS OTHERWISE SPECIFIED PRODUCE PART FROM CAD MODEL 78020117.SLDASM. ALL NON-TOLERANCED DIMENSIONS ARE BASIC TO THE CAD MODEL. REFER TO THE DRAWING FOR ASSOCIATED TOLERANCES, DATUMS AND FEATURE CONTROLS.		DO NOT SCALE DRAWING. DIMENSIONING AND TOLERANCING PER ASME Y14.5 - 2009 APPLY.	METRIC	
<p>TECHNICAL SPECIFICATIONS, PV1200 DISPLAY</p>				
APPROVALS	DATE (YYYY.MM.DD)	DESCRIPTION		
ENGINEER C. RAINBOLT	2018.01.24			
DRAWN J. PRUITT	2018.01.24			
APPROVED 1	-	PART NUMBER 78020117	DRAWING NUMBER 78-02-0117	REVISION B-
APPROVED 2	-	CAD FILE 78020117.SLDASM	SCALE 1:2 AND NOTED	SHEET SIZE A2
			SHEET 1 OF 4	

# HOW TO ORDER



## HARDWARE

- DISPLAY:**  
12.3" (320mm (H) X 130mm (V)) LVDS IPS LCD With LED Backlight
- COLOR:**  
16-bit color
- RESOLUTION:**  
WIDE 8:3, 1280 X 480 Pixels
- CONTRAST RATIO:**  
600:1 (Typ.)
- BRIGHTNESS:**  
1000 cd/m2
- DISPLAY SURFACE:**  
Anti-glare
- TOUCH PANEL:**  
Glove touch PCAP (T) (TC)
- REAL TIME CLOCK:**  
Li-Ion battery backup
- CONNECTORS:**  
(2) Ampseal 23 pin  
(1) M12 5 pin  
(1) USB Pig tail
- VIDEO INPUTS:**  
3 NTSC/PAL (Single channel viewable)

## COMMUNICATION

- CAN:**  
(2) CAN 2.0B according to ISO-11898-2; J1939; proprietary messaging
- SERIAL:**  
(1) RS-485 serial (MODBUS master/slave)
- USB:**  
(2) USB 2.0 Full Speed Host
- ETHERNET:**  
1 X Ethernet 10/100 Base-T (TC)
- WIFI:**  
802.11 b/g radio (TC)
- BLUETOOTH:**  
Fully integrated Bluetooth 2.1 class 1 (TC)

## ELECTRICAL

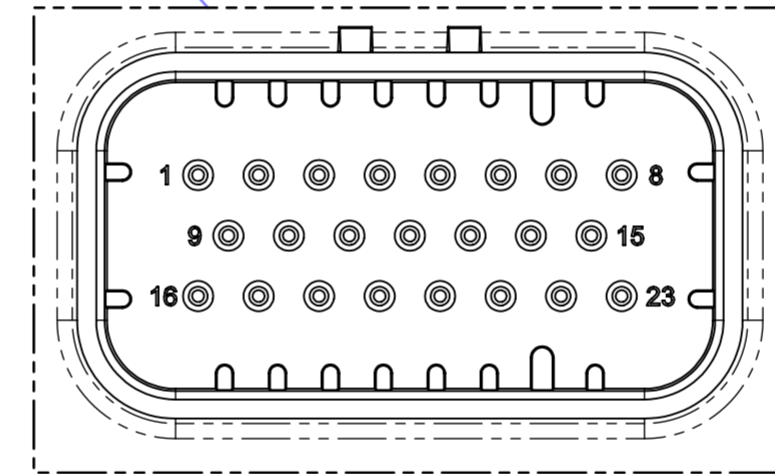
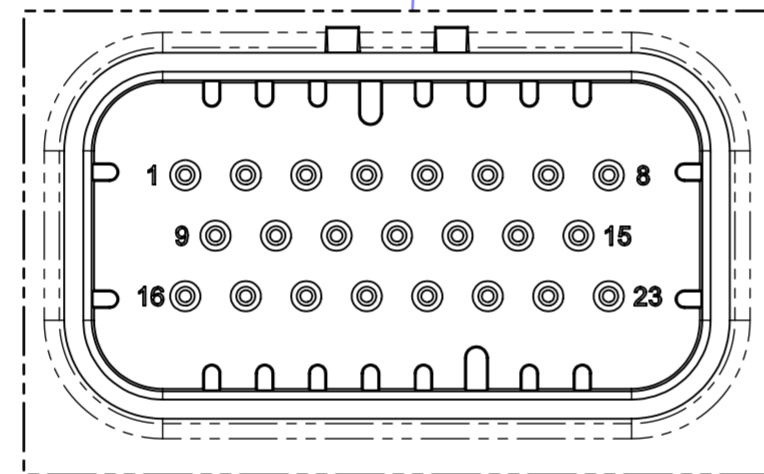
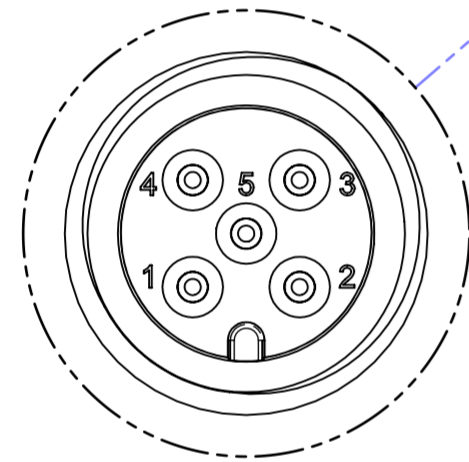
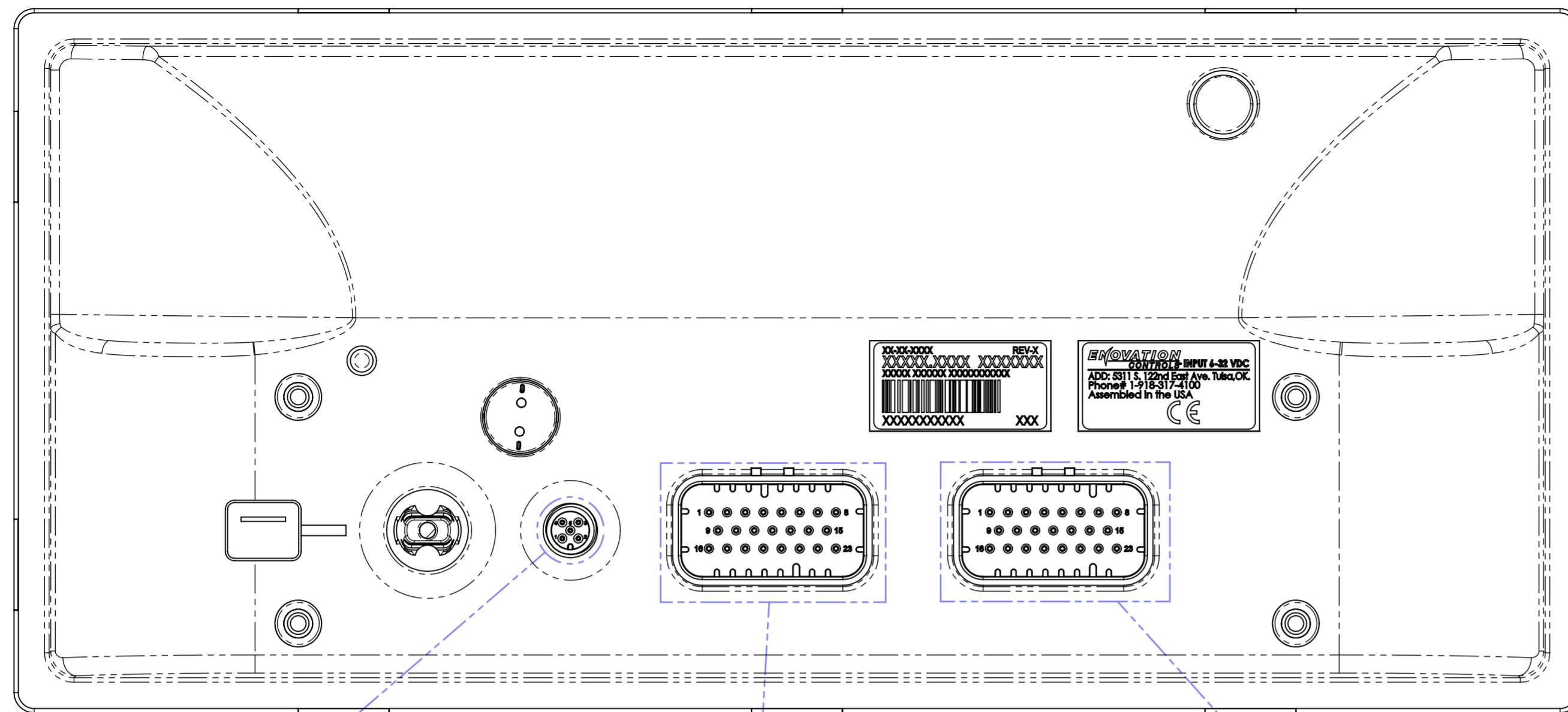
- OPERATING VOLTAGE:**  
6 - 36 VDC, reverse polarity protected
- OUTPUTS:**  
(1) 500mA Switched Low-side  
(1) Frequency Out (2Hz - 3KHz)
- INPUTS:**  
(3) Analog 0-5VDC, 4-20mA, or resistive, 10-bit resolution  
(5) Discrete digital, active-high  
(1) Frequency In (2Hz - 10kHz) 5Vpk-pk min, 120Vpk-pk max

## ENVIRONMENTAL

- (B) **OPERATING:**  
-40°C to +70°C [-40°F to +158°F]
- (B) **STORAGE:**  
-40°C to +85°C [-40°F to +185°F]
- PROTECTION:**  
IP66 and IP67, front and back, for outdoor use
- (B) **VIBRATION:**  
ISO 15003: 3.9 Grms (10 - 350Hz), 3 axis
- SHOCK:**  
±50G in 3 axis
- EMC/EMI:**  
SAE J1113, ISO 13766, CE per 2017/30/EU

## TECHNICAL SPECIFICATIONS

DO NOT SCALE DRAWING. DIMENSIONING AND TOLERANCING PER ASME Y14.5 - 2009 APPLY.	METRIC	
DESCRIPTION <b>TECHNICAL SPECIFICATIONS, PV1200 DISPLAY</b>		
PART NUMBER <b>78020117</b>	DRAWING NUMBER <b>78-02-0117</b>	REVISION <b>B-</b>
CAD FILE 78020117.SLDASM	SCALE 1:1 AND NOTED	SHEET SIZE A3
		SHEET 2 OF 4



5-POS CONNECTOR-C			
PIN #	FUNCTION		
	BASE	T	TC
1	NO CONNECTION		Ethernet TX+
2	NO CONNECTION		Ethernet RX+
3	NO CONNECTION		Ethernet TX-
4	NO CONNECTION		Ethernet RX-
5	NO CONNECTION		Ethernet Ground

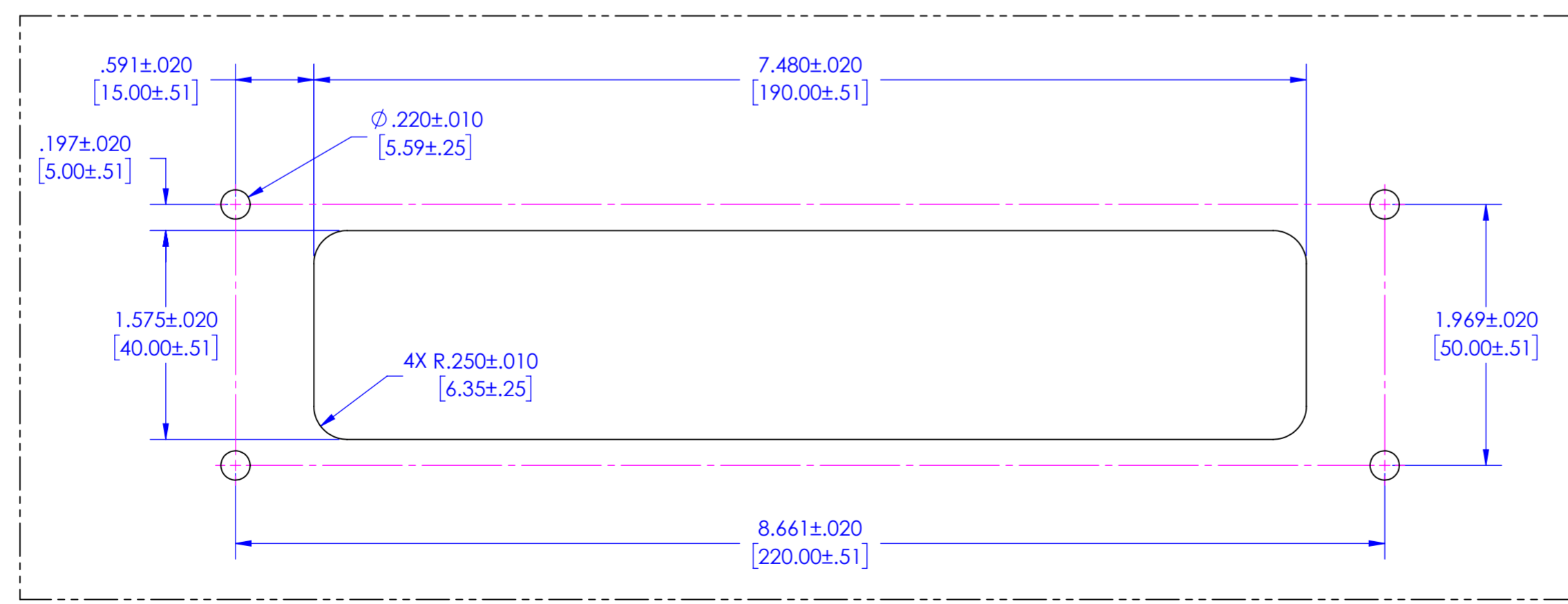
23-POS CONNECTOR-A			
PIN #	FUNCTION		
	BASE	T	TC
1			Digital Input 1
2			Analog Input 3
3			Analog Input 2
4			Analog Input 1
5			CAN 1 Low
6			CAN 1 High
7			Battery
8			Ground
9			Analog Input 3 Ground
10			Analog Input 2 Ground
11			Analog Input 1 Ground
12			Digital Input 3
13			Digital Input 2
14			Frequency Output 1
15			Ignition Input
16			No Connect
17			No Connect
18			CAN 2 Low
19			CAN 2 High
20			Digital Input 4
21			Digital Input 5
22			Digital Output
23			Frequency Output 2

23-POS CONNECTOR-B			
PIN #	FUNCTION		
	BASE	T	TC
1			Video Input 1
2			Video Input 2
3			Video Input 3
4			RS485 High
5			RS485 Low
6			No Connect
7			No Connect
8			No Connect
9			Video Input 1 Ground
10			Video Input 2 Ground
11			Video Input 3 Ground
12			No Connect
13			Frequency Input
14			Frequency Return
15			No Connect
16			USB D-
17			USB D+
18			USB 5v
19			USB Ground
20			USB Shield
21			No Connect
22			No Connect
23			No Connect

DO NOT SCALE DRAWING. DIMENSIONING AND TOLERANCING PER ASME Y14.5 - 2009 APPLY.	METRIC	
<b>TECHNICAL SPECIFICATIONS, PV1200 DISPLAY</b>		
PART NUMBER <b>78020117</b>	DRAWING NUMBER <b>78-02-0117</b>	REVISION <b>B-</b>
CAD FILE 78020117.SLDASM	SCALE 1:1 AND NOTED	SHEET SIZE A2
		SHEET 3 OF 4



RECESSED MOUNT PANEL CUTOUT DIMENSIONS  
FULL SCALE



SURFACE MOUNT PANEL CUTOUT DIMENSIONS  
FULL SCALE

TOLERANCE: +.020[0.51]/-0[0] UNLESS OTHERWISE SPECIFIED

DO NOT SCALE DRAWING. DIMENSIONING AND TOLERANCING PER ASME Y14.5 - 2009 APPLY.	METRIC ⊕ ⊖	<b>ENOVATION</b> CONTROLS™
DESCRIPTION <b>TECHNICAL SPECIFICATIONS, PV1200 DISPLAY</b>		
PART NUMBER <b>78020117</b>	DRAWING NUMBER <b>78-02-0117</b>	REVISION <b>B-</b>
CAD FILE 78020117.SLDASM	SCALE 1:1 AND NOTED	SHEET SIZE A2
		SHEET 4 OF 4