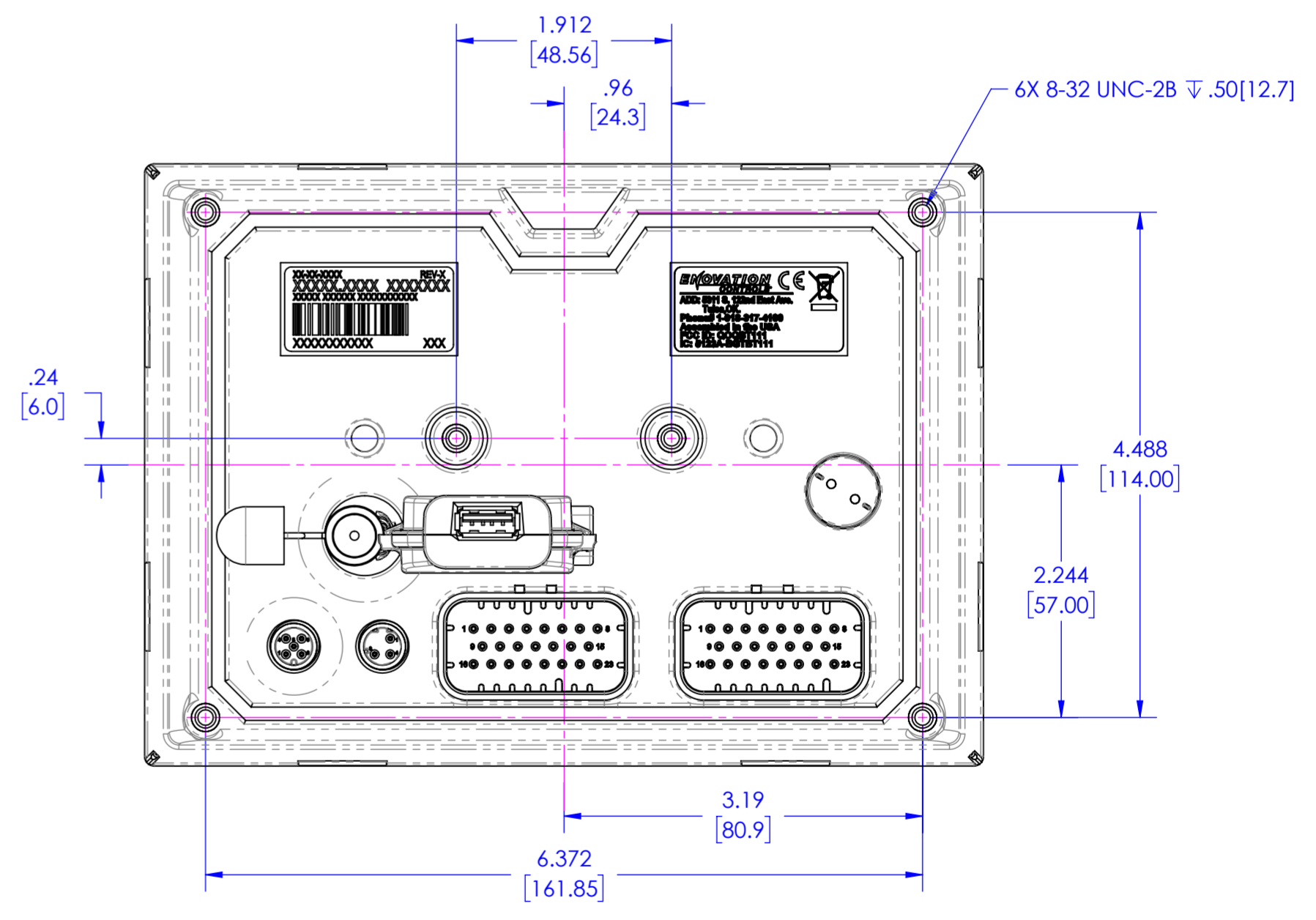
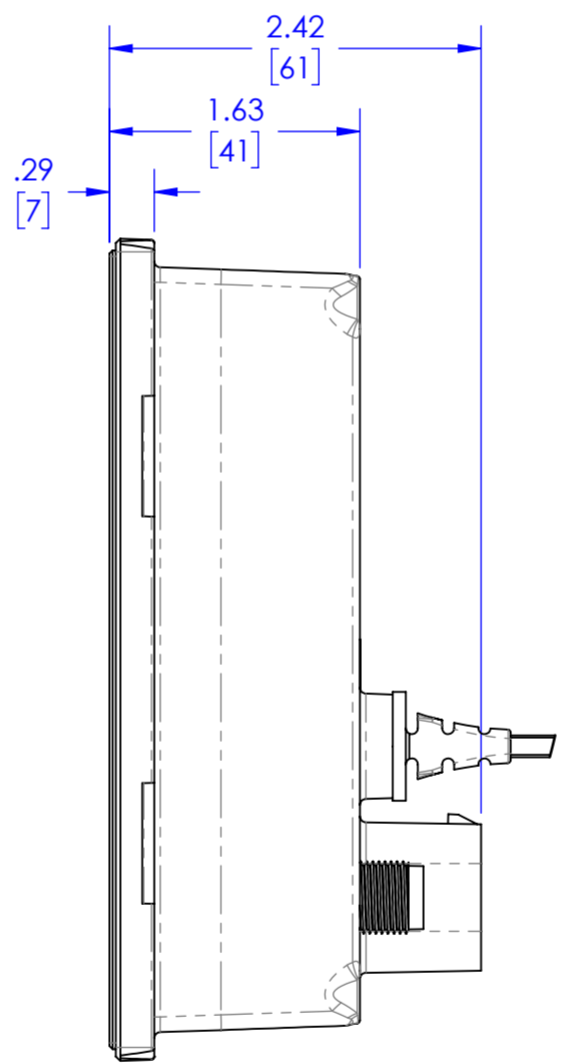
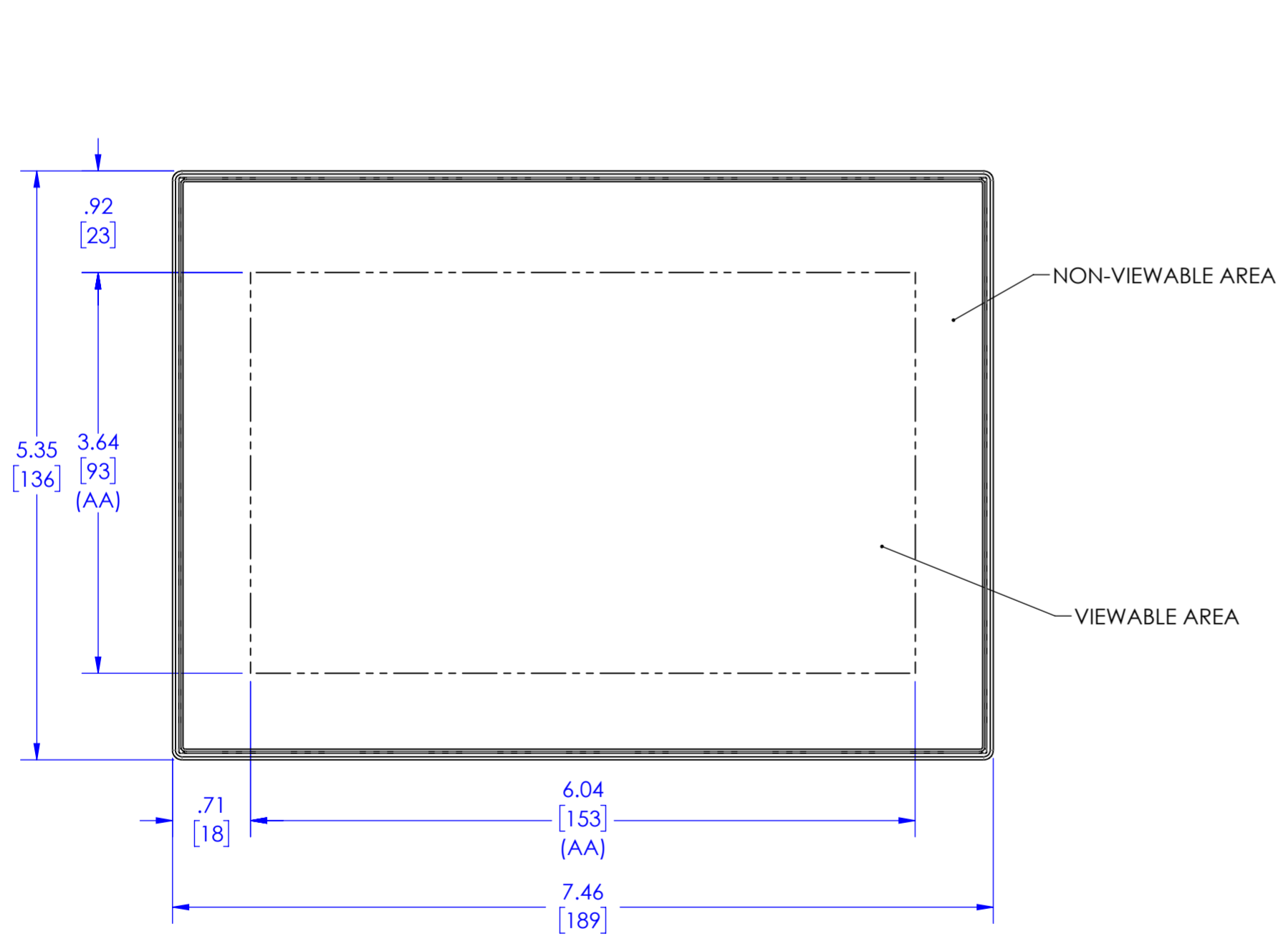
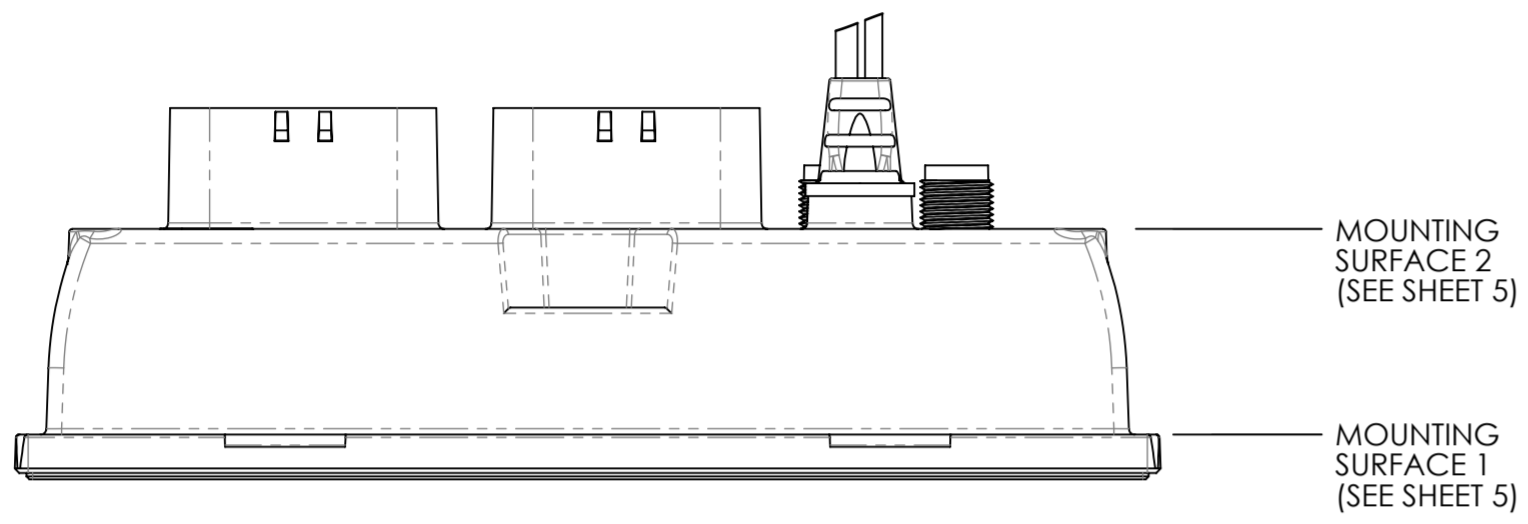


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REVISIONS			
ZONE	REV.	ECO#	DATE (YYYY.MM.DD)
-	A-	C01888	2018.01.08
-	B-	C02080	2018.03.29
-	C-	C02138	2018.04.23
-	C1	C03525	2019.06.07
-	D-	C03582	2019.07.16
-	E-	C04014	2020.05.11
-	F-	C04320	2020.05.11

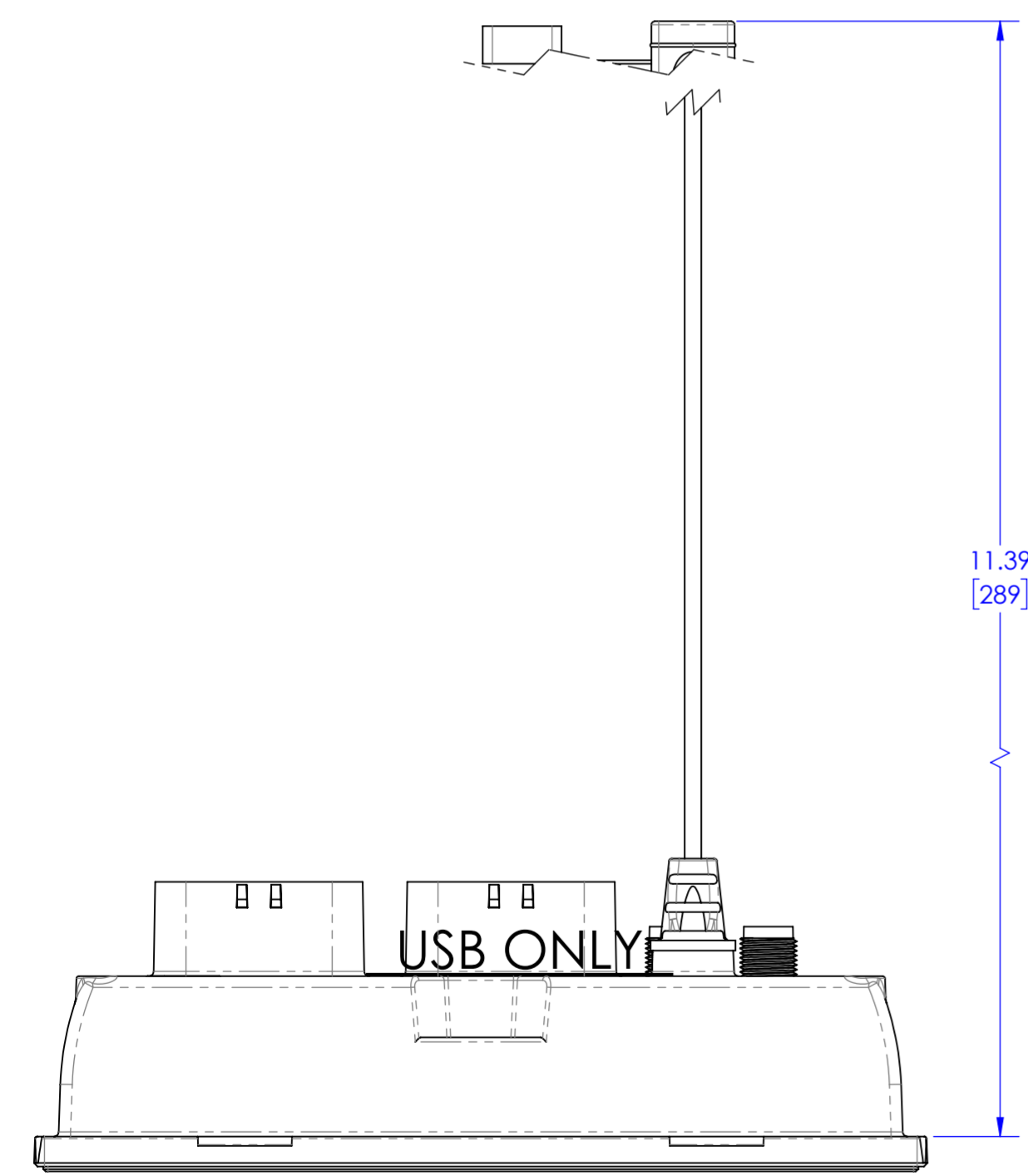


- NOTES:
- DIMENSIONS ARE REFERENCE ONLY.
 - DIMENSIONS IN [] ARE MILLIMETERS.
 - SEE SHEET 2 FOR OPTIONAL PIGTAIL CONFIGURATIONS.
 - SEE SHEET 3 FOR SPECIFICATIONS.
 - SEE SHEET 4 FOR CONNECTOR INFORMATION.
 - SEE SHEET 5 FOR PANEL CUTOUT DIMENSIONS.
 - SEE SHEET 6 FOR RECOMMENDED METAL BEZEL PLACEMENT DIMENSIONS.
 - PRODUCT REVISION RECORD: 78190520 (INTERNAL USE ONLY).

PHYSICAL DIMENSION SPECIFICATIONS

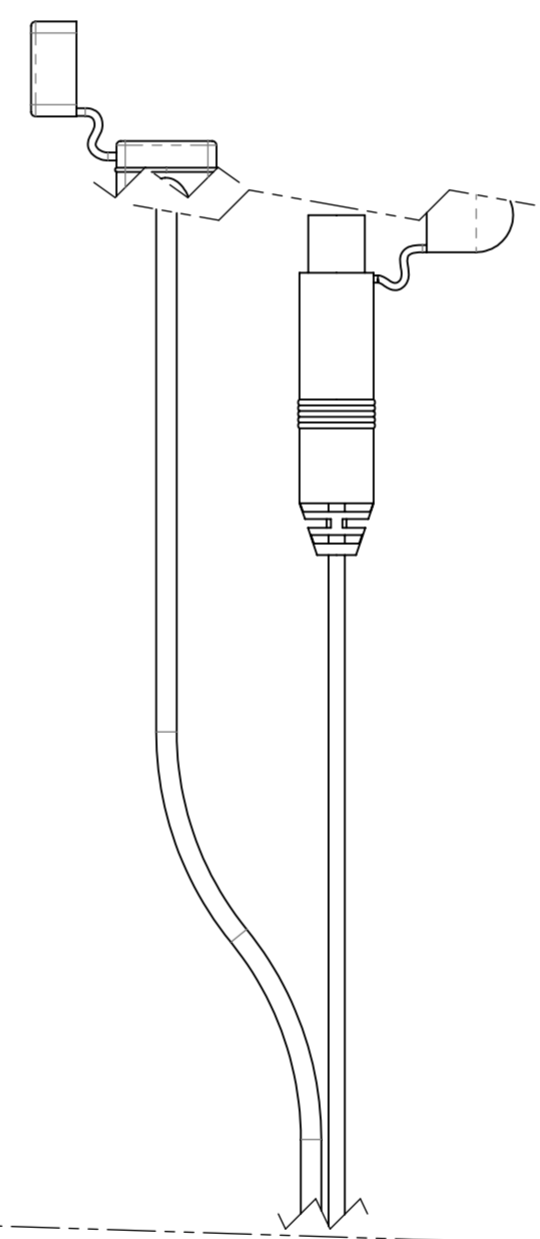
SPECIAL CHARACTERISTICS AND SYMBOLS (SEE ENOVATION CONTROLS QUALITY MANUAL FOR MORE INFORMATION)	
	KEY PRODUCT CHARACTERISTIC (KPC)
	SIGNIFICANT CHARACTERISTIC (SC)
	SAFETY/COMPLIANCE CHARACTERISTIC (SCC)

UNLESS OTHERWISE SPECIFIED PRODUCE PART FROM CAD MODEL 78020116.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.	INCH	
APPROVALS		DATE (YYYY.MM.DD)	DESCRIPTION	
ENGINEER	C. RAINBOLT	2018.01.08	CUSTOMER SPECIFICATION, PV700 DISPLAY	
DRAWN	J. PRUITT	2018.01.08		
APPROVED 1	C. RAINBOLT	2018.01.08		
APPROVED 2	J. ALEXANDER	2018.01.08		
PART NUMBER		78020116	DRAWING NUMBER	78-02-0116
CAD FILE		78020116.SLDASM	SCALE	1:1.25 AND NOTED
			SHEET SIZE	A2
			SHEET	1 OF 6
			REVISION	F-

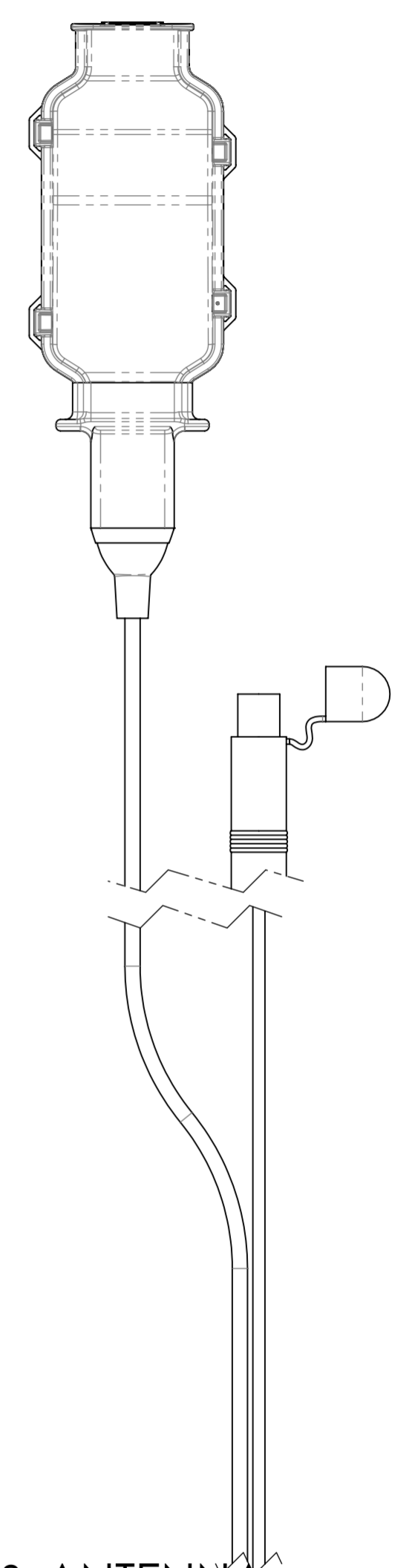


USB & ANTENNA
(WITH STEREO OPTION)

OPTIONAL PIGTAIL CONFIGURATIONS



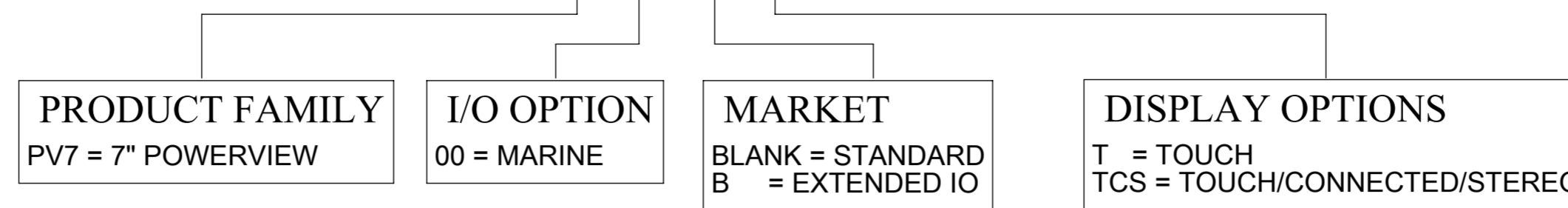
ICE-15 & ANTENNA
(WITH STEREO & EXTENDED BLUETOOTH OPTIONS)



DO NOT SCALE DRAWING. DIMENSIONING AND TOLERANCING PER ASME Y14.5 - 2009 APPLY.		INCH	ENOVATION CONTROLS™
DESCRIPTION CUSTOMER SPECIFICATION, PV700 DISPLAY			
PART NUMBER 78020116	DRAWING NUMBER 78-02-0116	REVISION	
CAD FILE 78020116.SLDASM	SCALE 0.75:1 AND NOTED	SHEET SIZE A2	SHEET 2 OF 6
			F-

HOW TO ORDER

XXX XX - X - X (EXAMPLE: PV700-B-TCS)



HARDWARE

- DISPLAY:**
7" (178mm) LED backlight LVDS TFT LCD
- COLOR:**
16-bit color
- RESOLUTION:**
WVGA, 800 X 480 PIXELS
- CONTRAST RATIO:**
600:1 (Typ.)
- BRIGHTNESS:**
1000 cd/m2
- SURFACE:**
Anti-glare and hard-coating
- TOUCH PANEL:**
Glove touch PCAP
- REAL TIME CLOCK:**
Li-Ion battery backup
- CONNECTORS:**
 - (2) Ampseal 23 pin
 - (1) M12 5 pin
 - (1) M12 3 pin
 - (1) USB (Pig tail)
 - (1) Antenna Connector (Pig tail) (TCS)
- VIDEO INPUTS:**
 - STANDARD:
(4) NTSC/PAL (Dual channel viewable)
 - EXTENDED IO:
(2) NTSC/PAL (Single channel viewable)
- AUDIO OUTPUTS:**
 - STANDARD:
(1) Sub
 - (2) Line-Out
 - EXTENDED IO:
(1) Single ended out

COMMUNICATION

- CAN:**
(2) CAN 2.0B according to ISO-11898-2; J1939 and CANopen; proprietary messaging
- USB:**
(1) USB 2.0 Full Speed Host
- ETHERNET:**
1 X Ethernet 10/100 Base-T (TCS)
- WIFI:**
802.11 b/g radio (TCS)
- BLUETOOTH:**
Fully integrated Bluetooth 2.1 class 1 (TCS)

ELECTRICAL

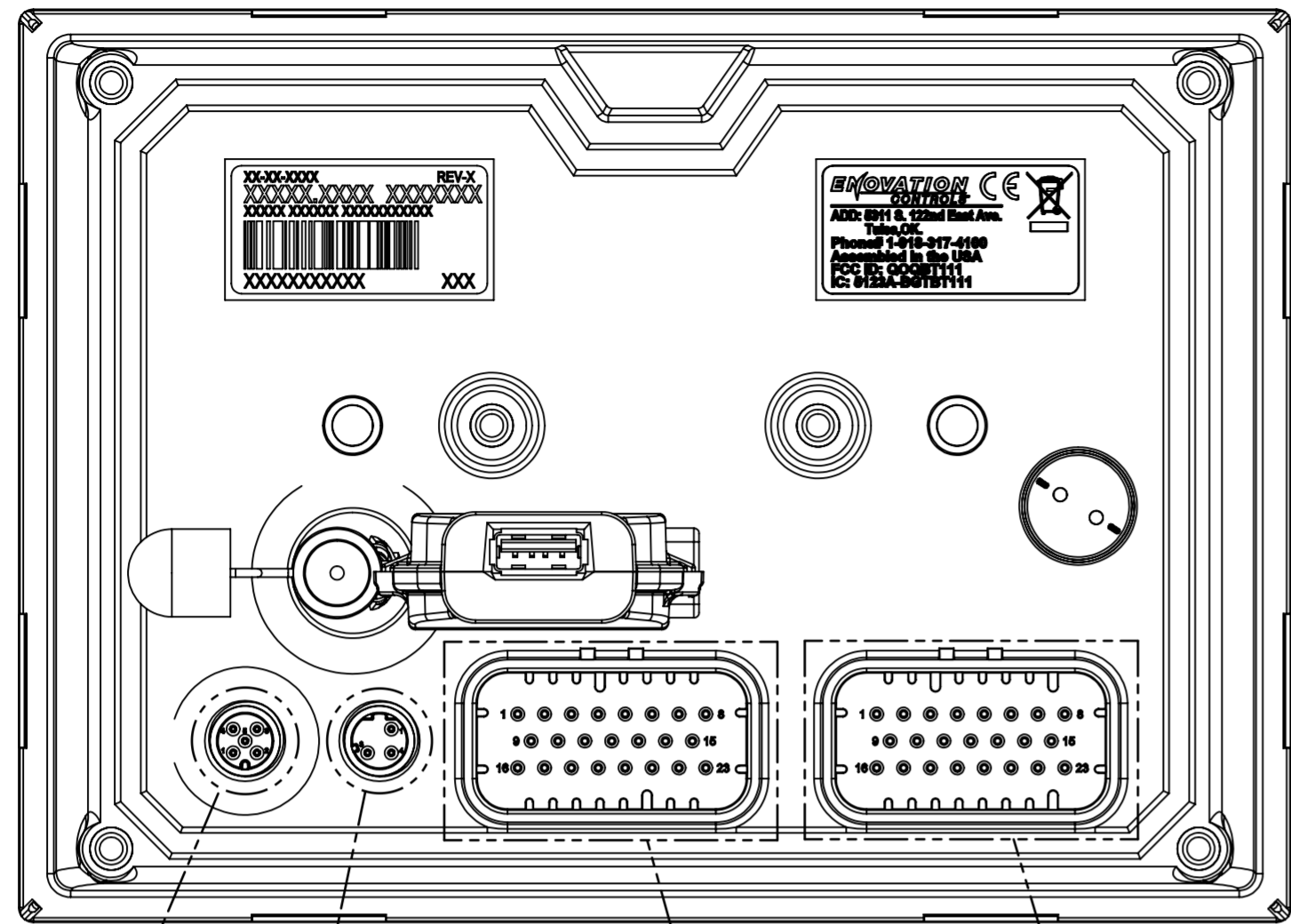
- OPERATING VOLTAGE:**
6 - 36 VDC, reverse polarity protected
- OUTPUTS:**
 - STANDARD:
(1) 500mA Switched Low-side
 - (2) Frequency Out (2Hz - 3KHz)
 - ORV:
(3) 500mA Switched Low-side
- INPUTS:**
 - STANDARD:
(3) Analog 0-5VDC, 4-20mA, or resistive, 10-bit resolution
 - (5) Discrete digital, active-high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

ENVIRONMENTAL

- OPERATING AND STORAGE:**
-40C to +85C [-40F to +185F]
- VIBRATION:**
PANEL MOUNT: 7.86 Grms (5 - 2000Hz), 3 axis
RAM MOUNT: TBD
- SHOCK:**
PANEL MOUNT: ±50G in 3 axis
RAM MOUNT: TBD
- EMC/EMI:**
SAE J1113 ISO 7637-2 ISO 11452 ISO 13766 ISO 16750-2 CISPR 25 EN 13309 EN ISO 14982 CE Mark per 2014/30/EU (EN 61326-1 & EN 60945) E-mark (ECE R10.5) RED per 2014/53/EU FCC Part 15
- IP RATING:**
IP69K

ELECTRICAL & ENVIRONMENTAL SPECIFICATIONS

DO NOT SCALE DRAWING. DIMENSIONING AND TOLERANCING PER ASME Y14.5 - 2009 APPLY.	INCH 	ENOVATION CONTROLS™	
DESCRIPTION CUSTOMER SPECIFICATION, PV700 DISPLAY			
PART NUMBER 78020116	DRAWING NUMBER 78-02-0116	SCALE 1:1 AND NOTED	SHEET SIZE A2
SHEET 3 OF 6	REVISION F-		

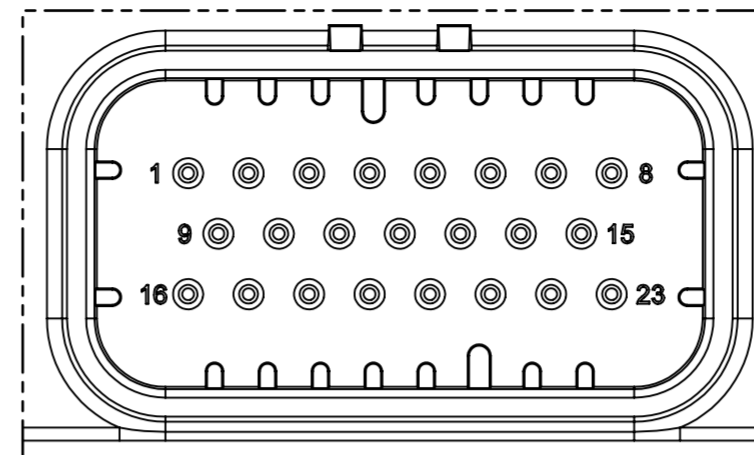


CONNECTOR C

CONNECTOR D

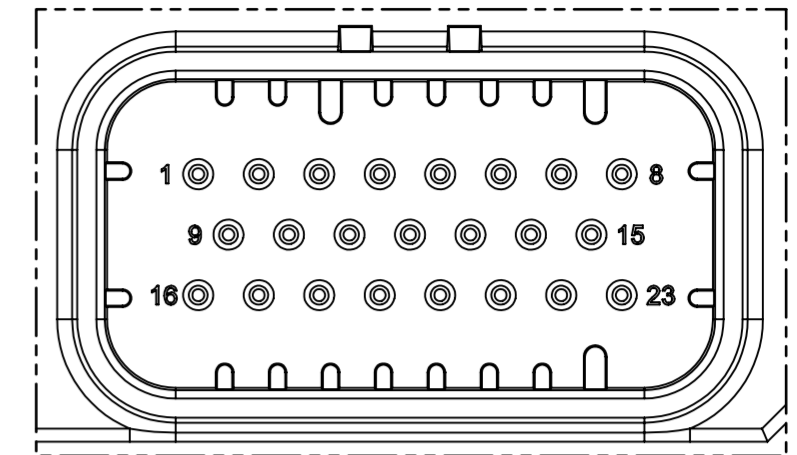
CONNECTOR A

CONNECTOR B



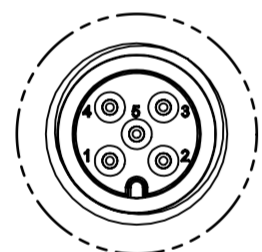
**CONNECTOR A
(MATES W/ AMP 770680-1)**

23-POS CONNECTOR A		
PIN #	FUNCTION	
	STANDARD	EXTENDED IO
1	Digital In 1	Digital In 1
2	Analog In 3 P	Analog In 3 P
3	Analog In 2 P	Analog In 2 P
4	Analog In 1 P	Analog In 1 P
5	CAN 1 L	CAN 1 L
6	CAN 1 H	CAN 1 H
7	Battery	Battery
8	Ground	Ground
9	Analog In 3 N	Analog In 3 N
10	Analog In 2 N	Analog In 2 N
11	Analog In 1 N	Analog In 1 N
12	Digital In 3	Digital In 3
13	Digital In 2	Digital In 2
14	Frequency Out 1	Digital Out 2
15	Ignition	Ignition
16	N/C	Digital In 6
17	N/C	Digital In 7
18	CAN 2 L	CAN 2 L
19	CAN 2 H	CAN 2 H
20	Digital In 4	Digital In 4
21	Digital In 5	Digital In 5
22	OD Output	Digital Out 1
23	Frequency Out 2	Digital Out 3



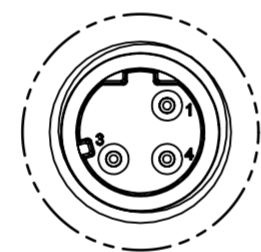
**CONNECTOR B
(MATES W/ AMP 770680-5)**

23-POS CONNECTOR B		
PIN #	FUNCTION	
	STANDARD	EXTENDED IO
1	Frequency In	Frequency In
2	Line-Out Sub Right P	Digital In 8
3	Line-Out Sub Right N	Digital In 9
4	Video 4 In P	Digital In 10
5	Video 3 In P	Digital In 11
6	Video 2 In P	Video 2 In P
7	Video 1 In P	Video 1 In P
8	Line-Out Sub Left P	Digital In 12
9	Frequency In Return	Frequency In Return
10	Amp Turn On	Amp Turn On/Dig Out 4
11	Video 4 In N	Digital In 13
12	Video 3 In N	Digital In 14
13	Video 2 In N	Video 2 In N
14	Video 1 In N	Video 1 In N
15	Line-Out Sub Left N	Digital In 15
16	Line-Out 1 Left P	Digital In 16
17	Line-Out 1 Left N	Digital In 17
18	Line-Out 1 Right P	Line Out 1 Right P
19	Line-Out 1 Right N	Line Out 1 Left N
20	Line-Out 2 Left P	Line Out 1 Left P
21	Line-Out 2 Left N	Line Out 1 Right N
22	Line-Out 2 Right P	N.C.
23	Line-Out 2 Right N	N.C.



**CONNECTOR C
(MATES W/ M12, 5P)**

5-POS CONNECTOR C	
PIN #	FUNCTION
1	Ethernet TX P
2	Ethernet RX P
3	Ethernet TX N
4	Ethernet RX N
5	Ethernet Shield

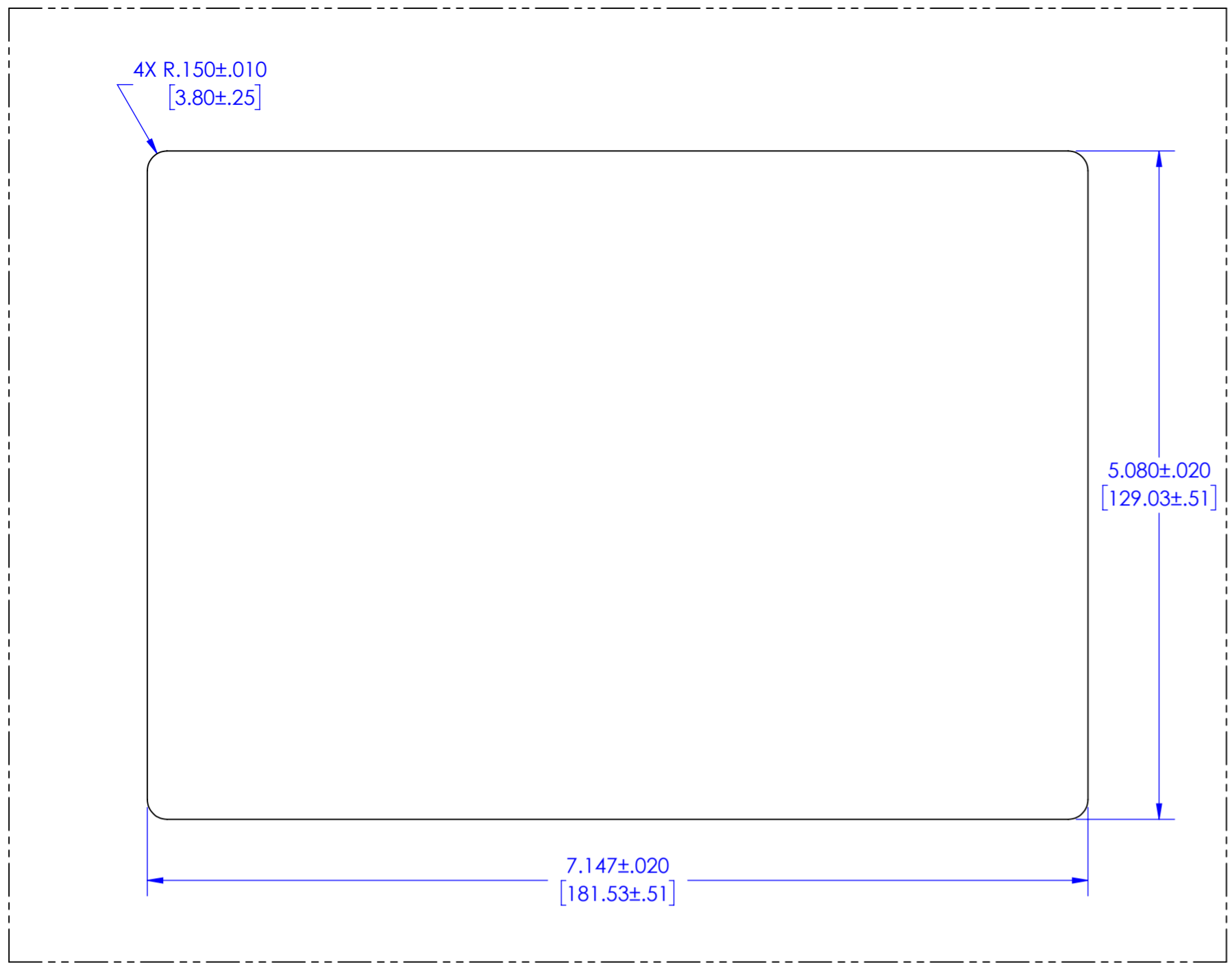


**CONNECTOR D
(MATES W/ M12, 3P)**

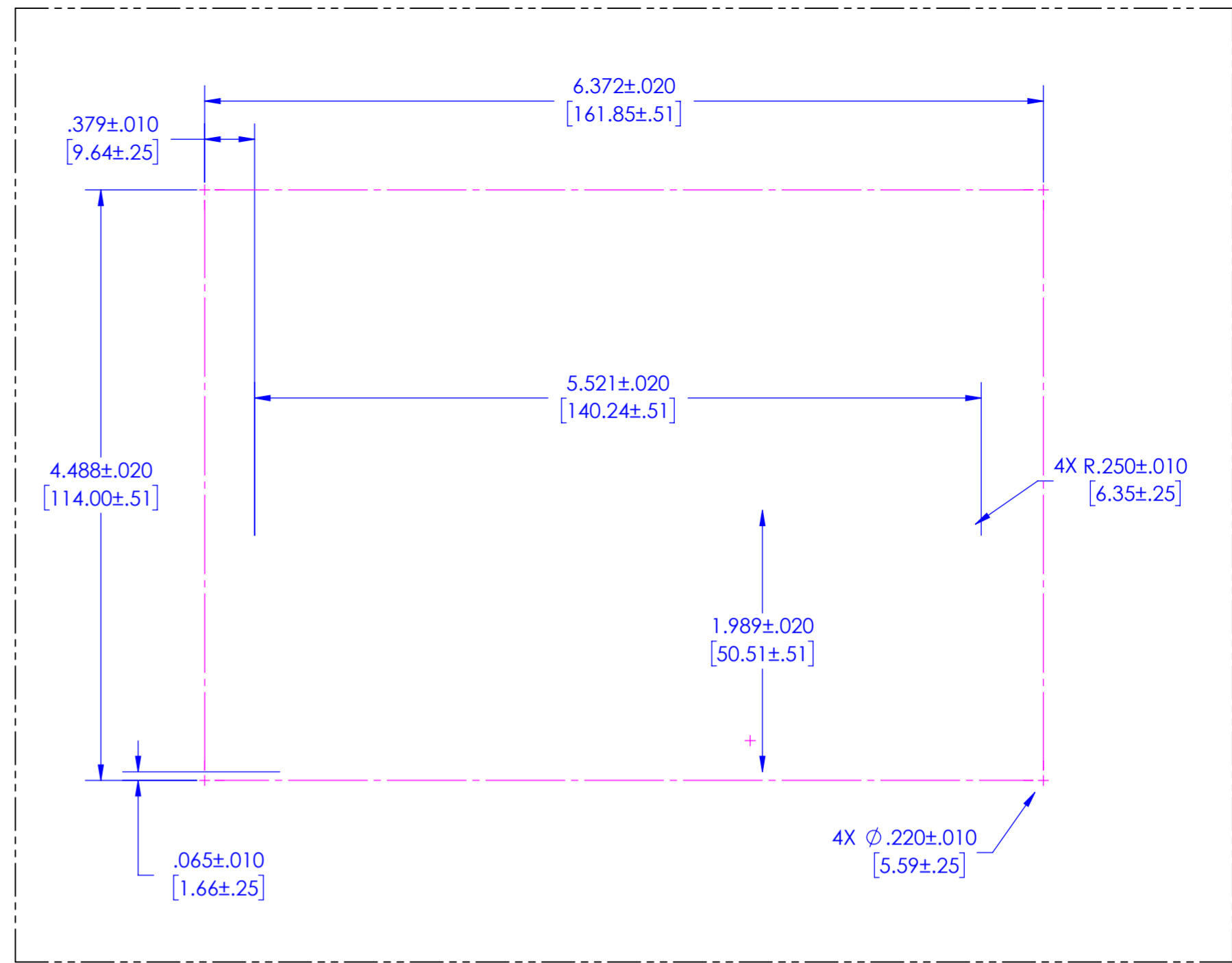
3-POS CONNECTOR D		
PIN #	FUNCTION	
	STD	EXTENDED IO
1	Radio Control BUS	N.C.
3	Radio Control V-In	N.C.
4	Ground	N.C.

CONNECTOR PIN-OUT SPECIFICATIONS

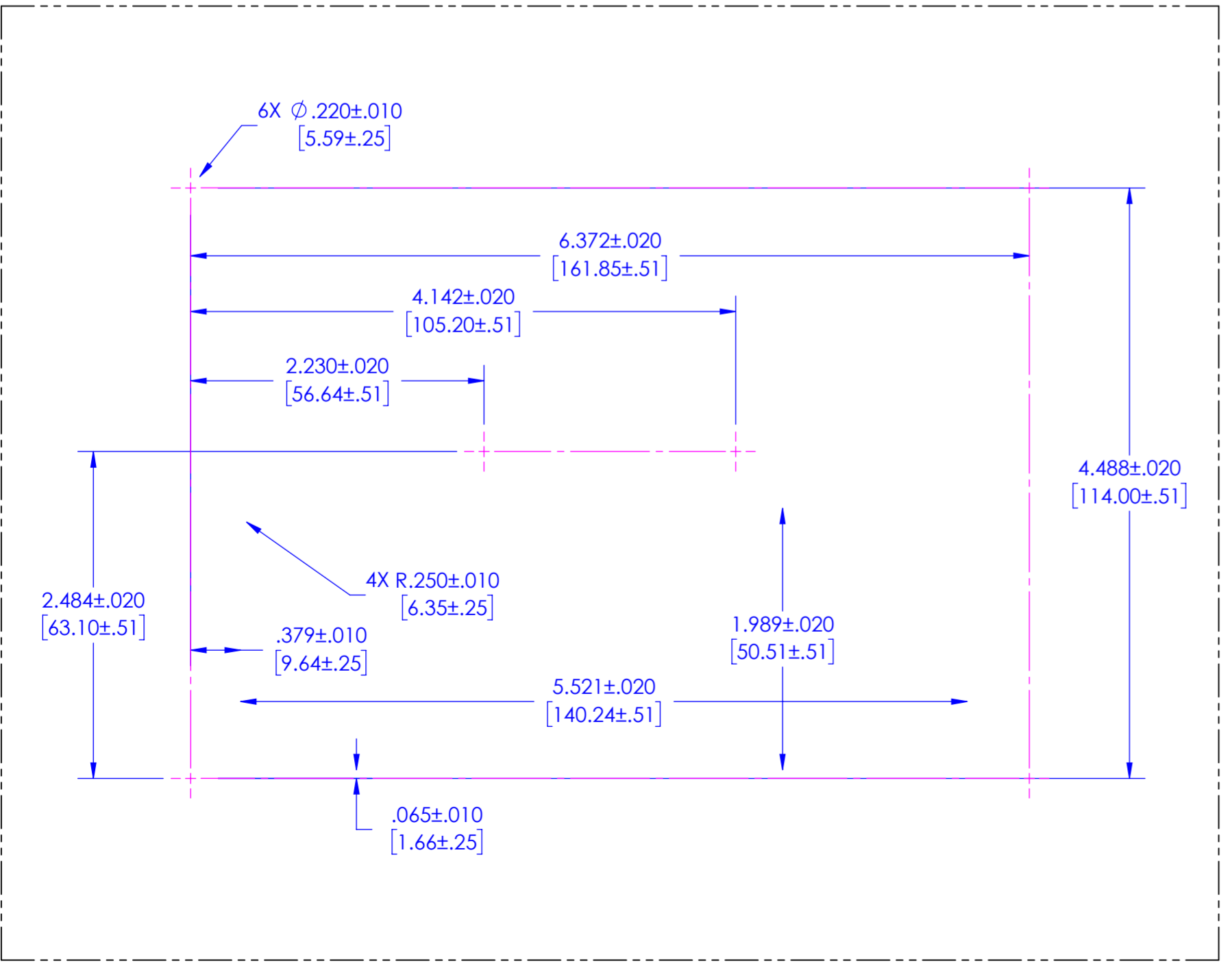
DO NOT SCALE DRAWING. DIMENSIONING AND TOLERANCING PER ASME Y14.5 - 2009 APPLY.	INCH	
DESCRIPTION CUSTOMER SPECIFICATION, PV700 DISPLAY		
PART NUMBER 78020116	DRAWING NUMBER 78-02-0116	REVISION F-
CAD FILE 78020116.SLDASM	SCALE 1:1 AND NOTED	SHEET SIZE A2
		SHEET 4 OF 6



MOUNTING SURFACE 1 OPTION
FULL SCALE
(VIEW FROM FRONT OF UNIT)



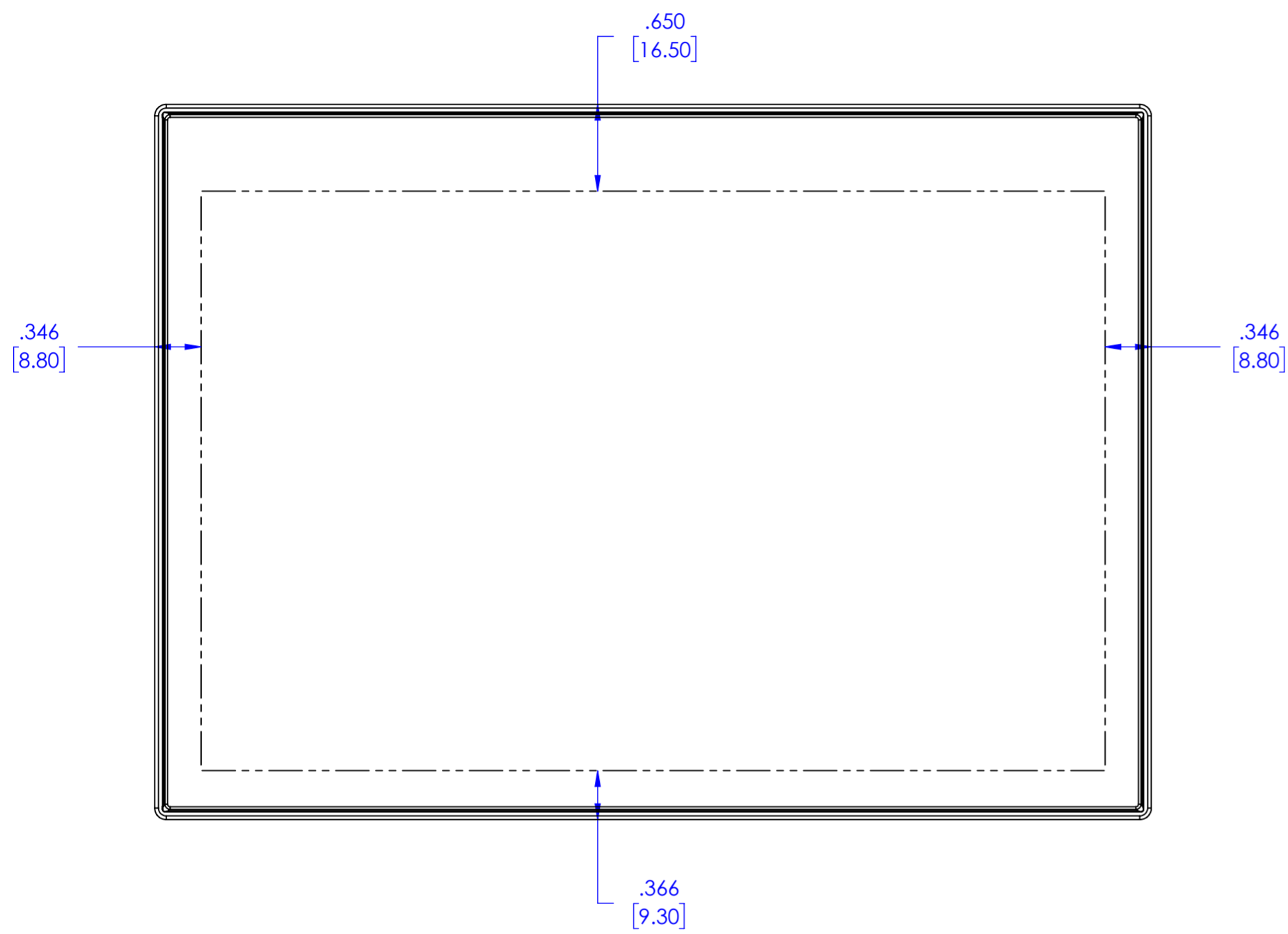
MOUNTING SURFACE 2 OPTION 1
PERIMETER HOLES
FULL SCALE
(VIEW FROM FRONT OF UNIT)



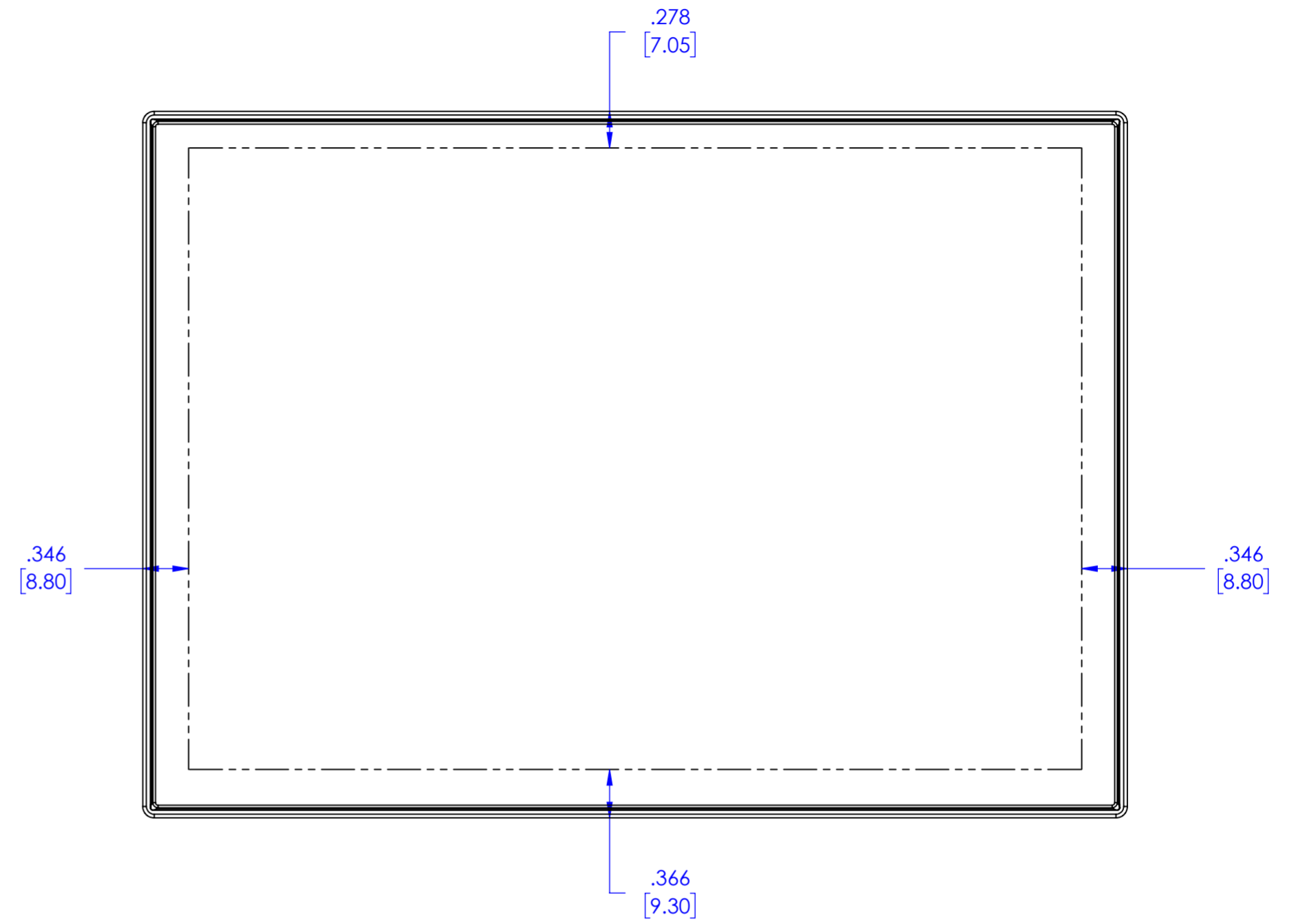
MOUNTING SURFACE 2 OPTION 2
RAM & PERIMETER HOLES
FULL SCALE
(VIEW FROM FRONT OF UNIT)

RECOMMENDED MOUNTING DIMENSIONS

DO NOT SCALE DRAWING. DIMENSIONING AND TOLERANCING PER ASME Y14.5 - 2009 APPLY.	INCH ⊞ ⊕	ENOVATION CONTROLS™
DESCRIPTION CUSTOMER SPECIFICATION, PV700 DISPLAY		
PART NUMBER 78020116	DRAWING NUMBER 78-02-0116	REVISION F-
CAD FILE 78020116.SLDASM	SCALE 1:1 AND NOTED	SHEET SIZE A2
		SHEET 5 OF 6



RECOMMENDED METAL BEZEL PLACEMENT
TO PREVENT FALSE TOUCHES
(WIFI & BLUETOOTH PERFORMANCE MAY
BE COMPROMISED)



RECOMMENDED METAL BEZEL PLACEMENT
TO PREVENT FALSE TOUCHES
(OPTIMAL WIFI & BLUETOOTH
PERFORMANCE)

RECOMMENDED BEZEL PLACEMENT

DO NOT SCALE DRAWING. DIMENSIONING AND TOLERANCING PER ASME Y14.5 - 2009 APPLY.	INCH	
DESCRIPTION CUSTOMER SPECIFICATION, PV700 DISPLAY		
PART NUMBER 78020116	DRAWING NUMBER 78-02-0116	REVISION F-
CAD FILE 78020116.SLDASM	SCALE 1:1 AND NOTED	SHEET SIZE A2
	SHEET 6 OF 6	