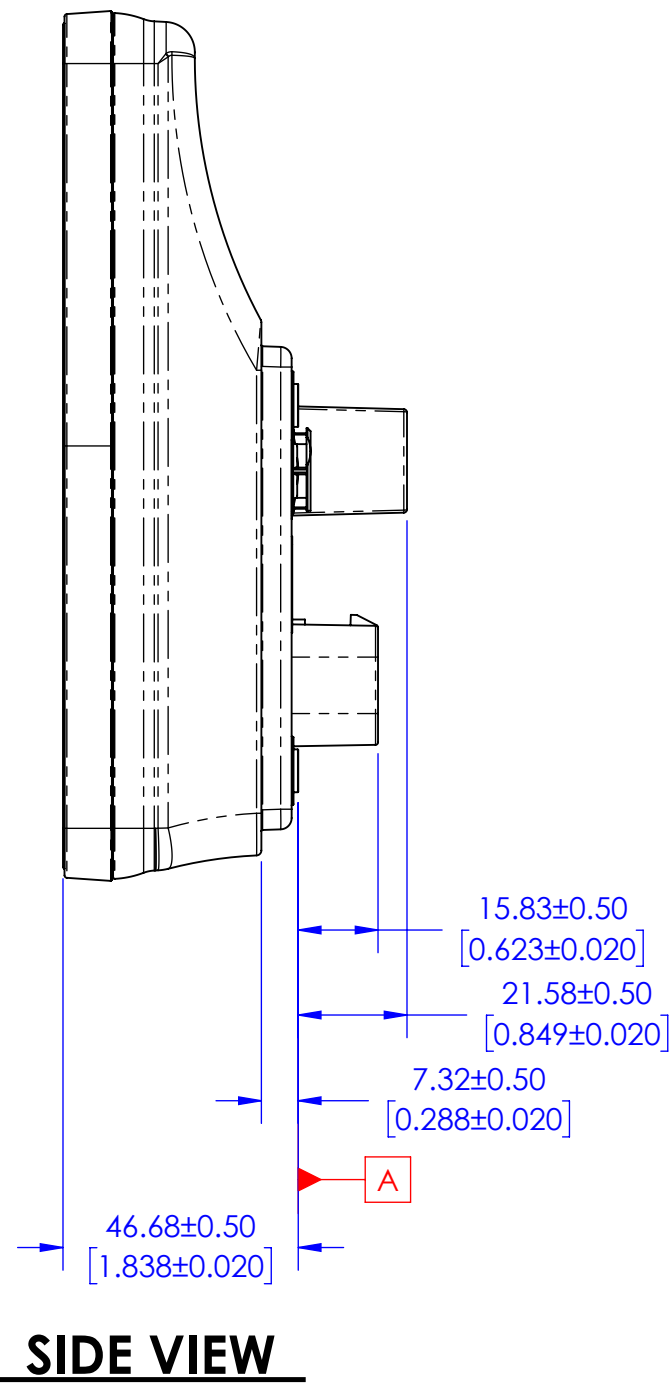
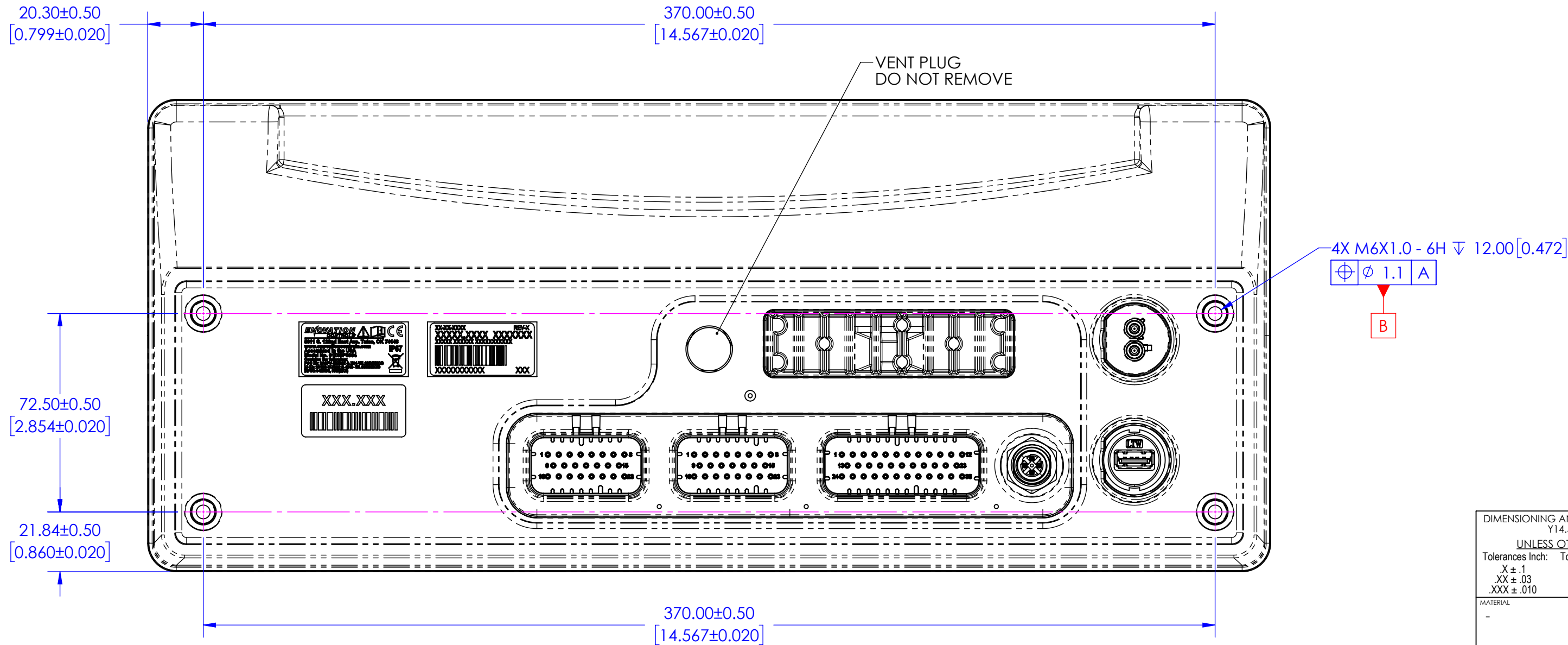
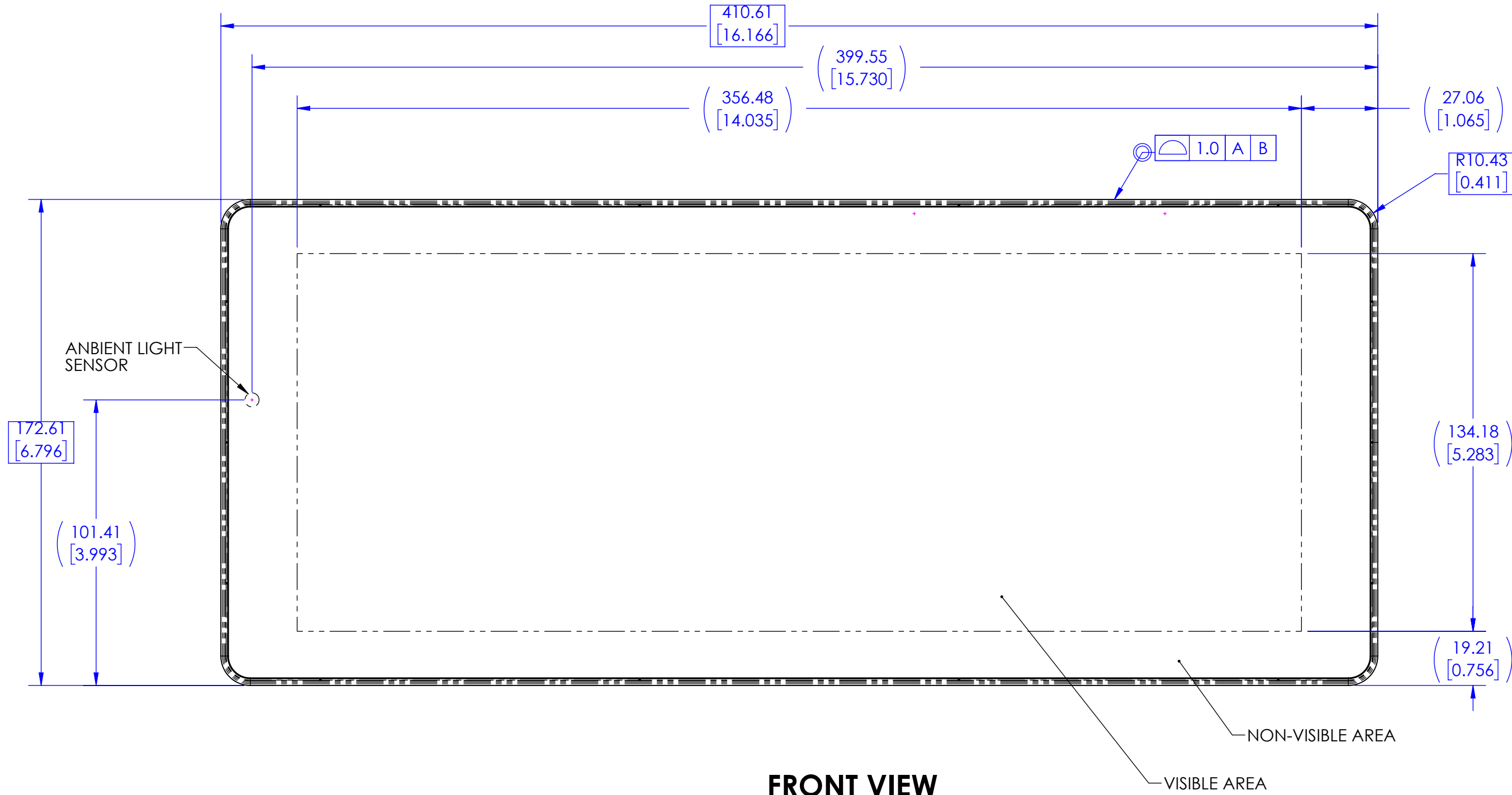


REVISIONS						
ZONE	REV.	ECO#	DESCRIPTION	DATE (YYYY.MM.DD)	BY	APPVD
-	A-	C05800	INITIAL DRAWING RELEASE	2023.06.16	JP	LB
-	A1	C06645	ADDED PIN OUT SPEC FOR FAKRA CONNECTOR (SHEET 3)	2024.10.23	JP	VE
-	A2	C07232	CUSTOMER MODEL ADDED TO AGILE - NO CHANGES TO DRAWING	2025.09.15	JP	JA
-	A3	C07496	UPDATED DESCRIPTION; PRODUCT NAME WAS PROJECT CODE NAME	2026.02.12	JP	SL

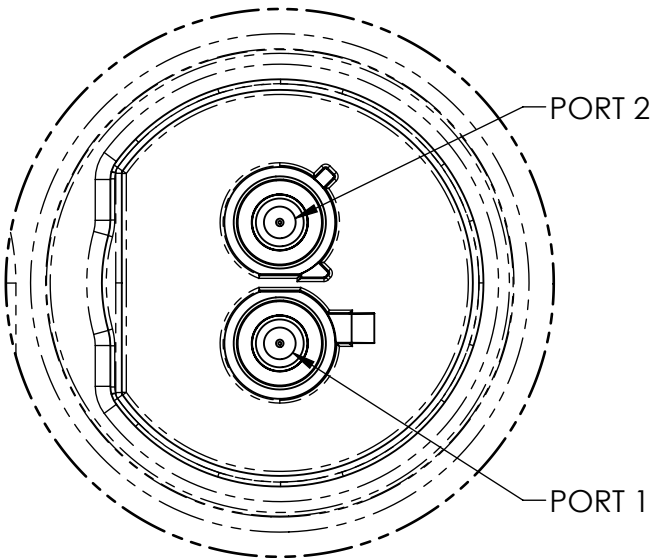
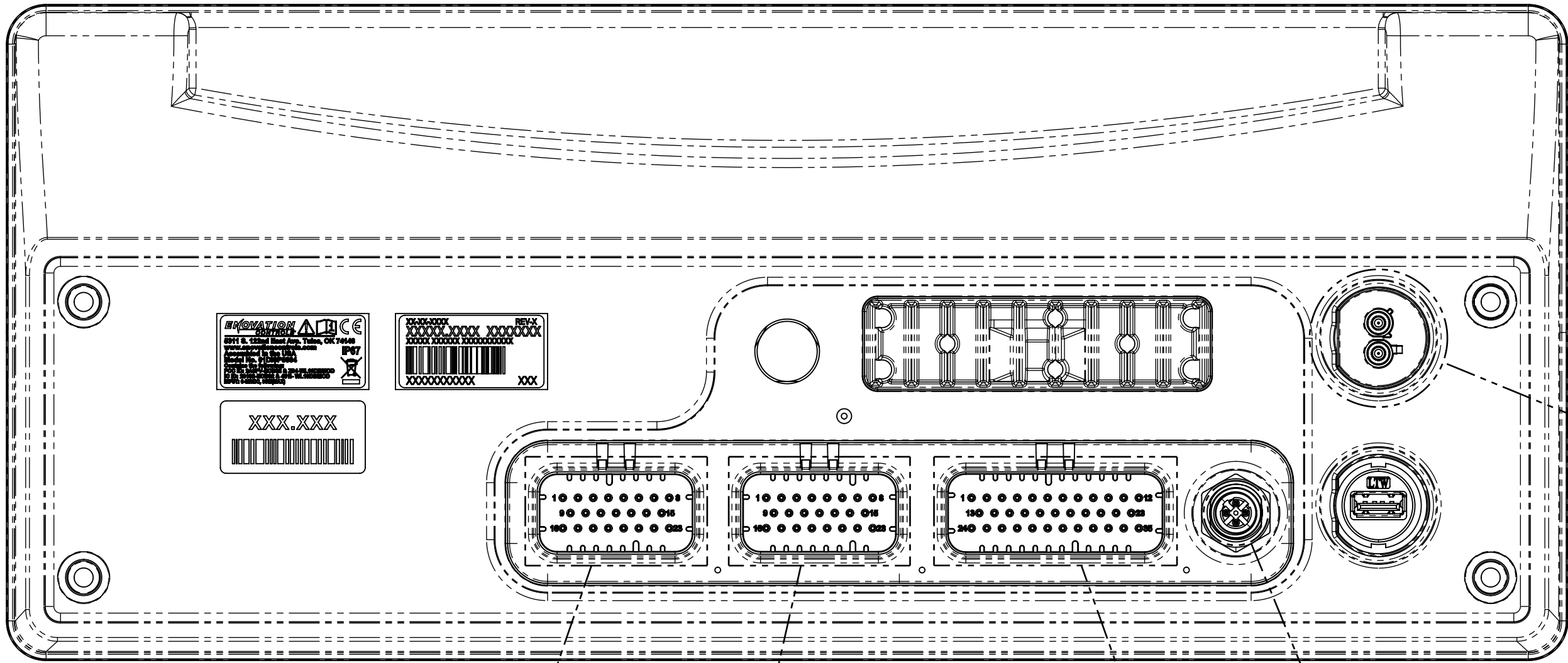


- NOTES:
- REFER TO ENOVATION CONTROLS 3D CAD MODEL 78020680 FOR NON DIMENSIONED FEATURES.
- 2.0 A B APPLIES TO ALL UNDIMENSIONED GEOMETRY FROM THE TRUE SURFACE.

DIMENSIONING AND TOLERANCING PER ASME Y14.5 - 2009 APPLY. UNLESS OTHERWISE SPECIFIED Tolerances Inch: X ± .1 XX ± .03 XXX ± .010		Tolerances Metric: X ± .2 XX ± .7 XXX ± .25		ANGLES ± 2° ✓ 125	
MATERIAL -		DESCRIPTION TECH SPECS, PV-U150W-TSA5		PART NUMBER 78020680	
FINISH -		DRAWING NUMBER 78020680		REVISION A3	
CAD FILE 78020680.SLDASM		SCALE 1:1.5 AND NOTED		SHEET SIZE A2	
				SHEET 1 OF 4	

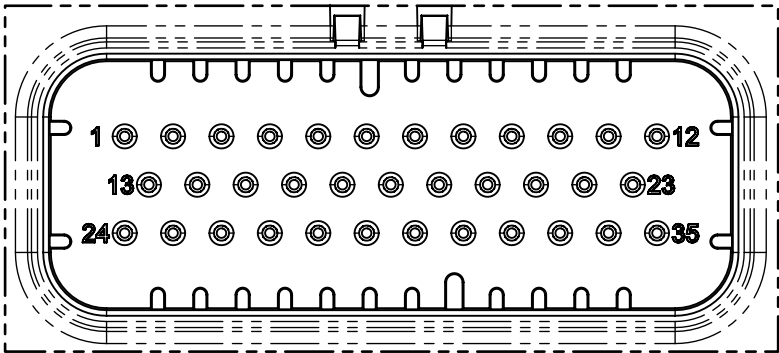
1	2	3	4	5	6	DRAWING NUMBER 78020680		REVISION A3														
HOW TO ORDER PV-U150W-TSA5-XXXX PLATFORM OPTIONS QDAB = DAB+ (Digital Audio Broadcast) QWX = Weather Band																						
ELECTRICAL & ENVIRONMENTAL SPECIFICATIONS																						
HARDWARE DISPLAY: 15" (133.38mm (H) X 355.68mm (V)) LVDS TT LCD with LED backlight COLOR: 24-bit color RESOLUTION: 1920 X 720 PIXELS CONTRAST RATIO: 1000:1 (Typ.) BRIGHTNESS: 1000 cd/m2 DISPLAY SURFACE: Anti-glare TOUCH PANEL: Glove touch PCAP REAL TIME CLOCK: Li-Ion battery backup CONNECTORS: (2) Ampseal 23 pin (1) Ampseal 35 pin (1) M12 4 pin (1) USB Pig tail (1) Radio Antenna Jack VIDEO INPUTS: 3 NTSC/PAL (Single channel viewable)			COMMUNICATION CAN: (2) CAN 2.0B according to ISO-11898-2; J1939 and CANopen; proprietary messaging SERIAL: (1) RS-485 Serial (MODBUS master/slave) USB: (2) USB 2.0 Full Speed Host ETHERNET: (1) Ethernet 10/100 Base-T WIFI: 802.11 b/g radio BLUETOOTH: Fully integrated Bluetooth 2.1 class 1 AUDIO BUS: (1) A2B			INFOTAINMENT STEREO: (4) Outputs (20Hz-20KHz) (1) Subwoofer (configurable, 30Hz-250Hz) (2) Auxiliary Inputs (3) Amp Turn On/Accessory FM TUNER: Frequency Range: 87.9MHz-107.9MHz AM TUNER: Frequency Range: 530kHz-1710kHz WX TUNER: (WX OPTION) Frequency Range: 162.4MHz-162.55MHz DAB+ TUNER: (DAB OPTION) Frequency Range: 170MHz-240MHz USB MEDIA: MP3, M4A Playback BLUETOOTH: Audio Streaming																
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 OPERATING: -40°C to +70°C [-40°F to +158°F] STORAGE: -40°C to +85°C [-40°F to +185°F] PROTECTION: IP66 and IP67, front and back, for outdoor use VIBRATION: ISO 15003: 3.9 Grms (10 - 350Hz), 3 axis SHOCK: ±50G in 3 axis EMC/EMI: SAE J1113, ISO 13766, CE per 2014/30/EU																			
TECH SPECS, PV-U150W-TSA5 <table><tr><td colspan="2">PART NUMBER 78020680</td><td colspan="3">DRAWING NUMBER 78020680</td><td colspan="2">REVISION A3</td></tr><tr><td colspan="2">CAD FILE 78020680.SLDASM</td><td colspan="2">SCALE 1:5 AND NOTED</td><td colspan="1">SHEET SIZE A3</td><td colspan="1">SHEET 2 OF 4</td></tr></table>										PART NUMBER 78020680		DRAWING NUMBER 78020680			REVISION A3		CAD FILE 78020680.SLDASM		SCALE 1:5 AND NOTED		SHEET SIZE A3	SHEET 2 OF 4
PART NUMBER 78020680		DRAWING NUMBER 78020680			REVISION A3																	
CAD FILE 78020680.SLDASM		SCALE 1:5 AND NOTED		SHEET SIZE A3	SHEET 2 OF 4																	
1	2	3	4	5	6																	

CONNECTOR PIN-OUT SPECIFICATIONS



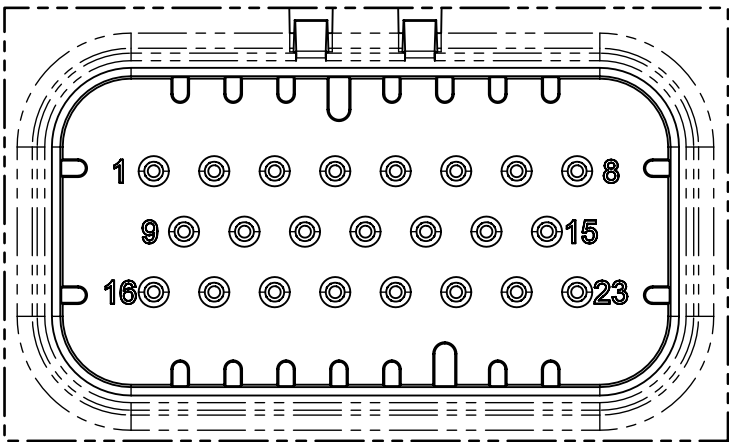
DETAIL E
SCALE 2 : 1

ANTENNA, 8MM PITCH FAKRA DUAL "B" (REF. MATING CONNECTOR ROSENBERGER 59Z115-000B)	
PORT #	FUNCTION
1	Primary In - 12V Powered, AM/FM/DAB Band 3
2	Secondary In - FM Band 2



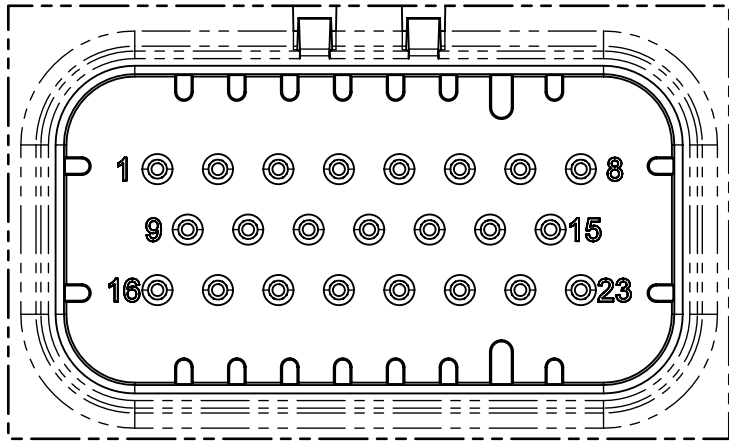
DETAIL C
SCALE 2 : 1

35-POS CONNECTOR-C (MATING CONNECTOR AMP 776164-1 BLACK)	
PIN #	FUNCTION
1	Video In 4 P
2	Video In 4 N
3	A2B P
4	A2B N
5	Line In 1 Left
6	Line In 1 Left Return
7	Line In 1 Right
8	Line In 1 Right Return
9	Line In 2 Left
10	Line In 2 Left Return
11	Line In 2 Right
12	Line In 2 Right Return
13	A2B Shield
14	A2B Ground
15	A2B 5V
16	Line Out 5 Left P
17	Line Out 5 Left N
18	Line Out 4 Left P
19	Line Out 4 Left N
20	Line Out 3 Left P
21	Line Out 3 Left N
22	Line Out 2 Left N
23	Line Out 2 Left P
24	Amp Turn-on 3
25	Amp Turn-on 2
26	Amp Turn-on 1
27	No Connect
28	Line Out 5 Right P
29	Line Out 5 Right N
30	Line Out 4 Right P
31	Line Out 4 Right N
32	Line Out 3 Right P
33	Line Out 3 Right N
34	Line Out 2 Right P
35	Line Out 2 Right N



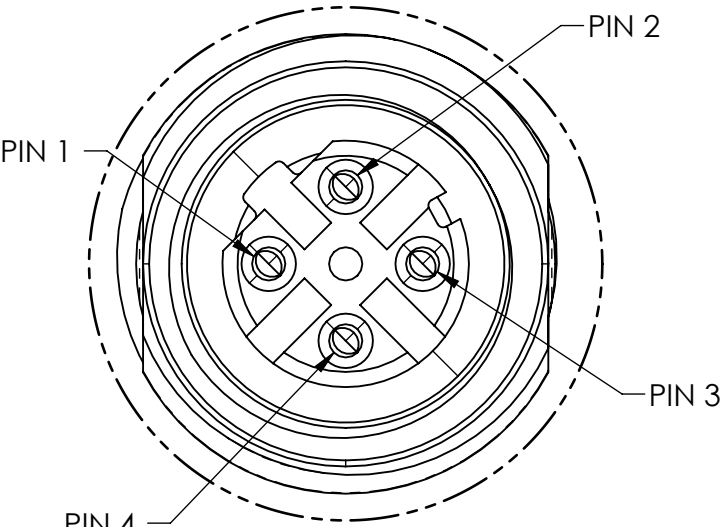
DETAIL A
SCALE 2 : 1

23-POS CONNECTOR-A (MATING CONNECTOR AMP 770680-1 BLACK)	
PIN #	FUNCTION
1	Digital In 1
2	Analog In 3
3	Analog In 2
4	Analog In 1
5	CAN 1 L
6	CAN 1 H
7	Battery
8	Ground
9	Analog In 3 Return
10	Analog In 2 Return
11	Analog In 1 Return
12	Digital In 3
13	Digital In 2
14	Frequency Out 1
15	Ignition
16	No Connect
17	No Connect
18	CAN 2 L
19	CAN 2 H
20	Digital In 4
21	Digital In 5
22	Open Drain Out
23	Frequency Out 2



DETAIL B
SCALE 2 : 1

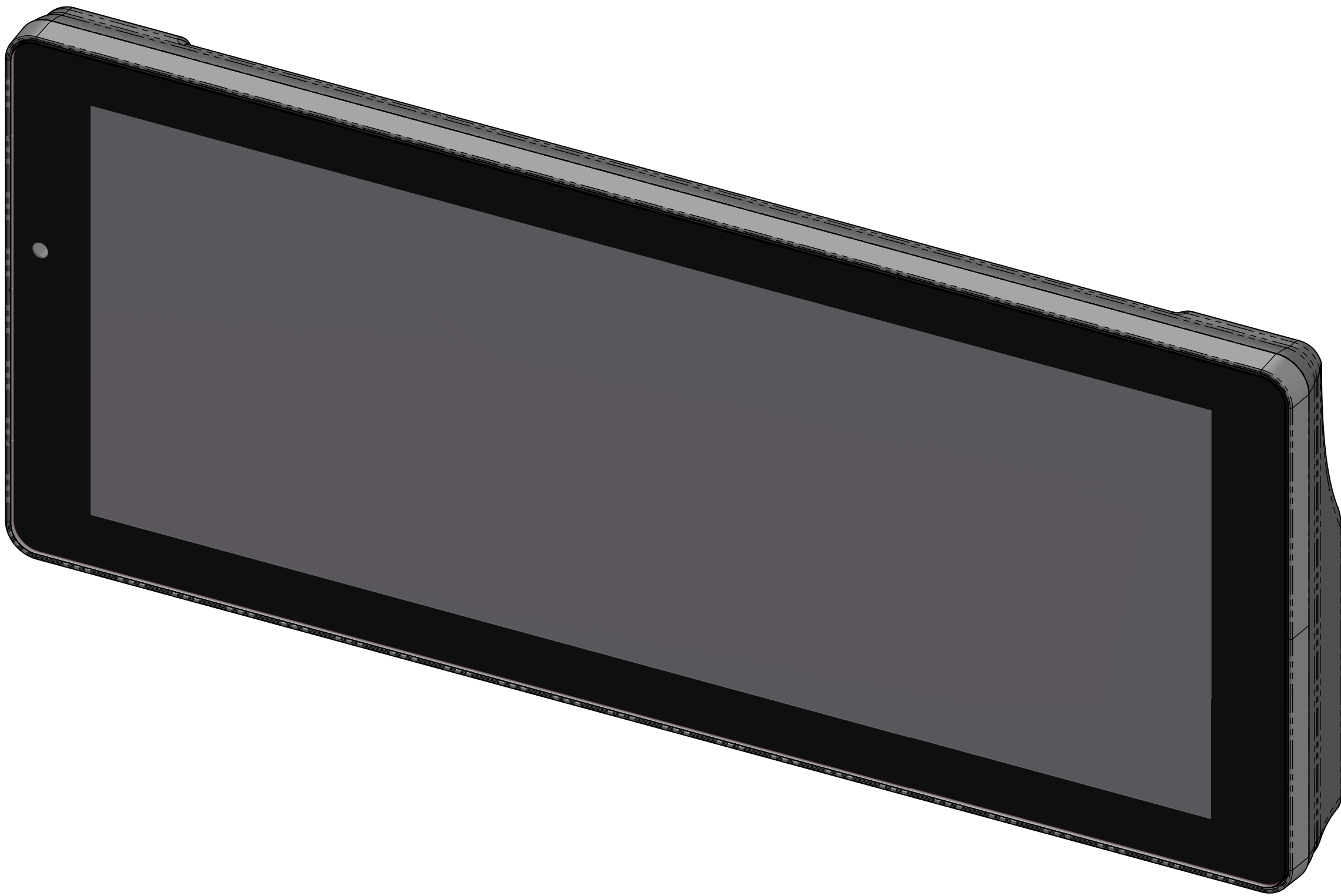
23-POS CONNECTOR-B (MATING CONNECTOR AMP 770680-4 GRAY)	
PIN #	FUNCTION
1	Video In 1 P
2	Video In 2 P
3	Video In 3 P
4	RS485 H
5	RS485 L
6	Line Out 1 Right N
7	Line Out 1 Right P
8	Line Out 1 Left N
9	Video In 1 N
10	Video In 2 N
11	Video In 3 N
12	Radio Control VIN
13	Frequency In
14	Frequency In Return
15	Line Out 1 Left P
16	USB1 N
17	USB1 P
18	USB1 VBUS
19	USB1 Ground
20	USB1 Shield
21	Radio Control Bus
22	Radio Control Shield
23	Radio Control Ground



DETAIL D
SCALE 4 : 1

4-POS CONNECTOR-D (MATING CONNECTOR M-12, 4 POS, D-CODED, MALE)	
PIN #	FUNCTION
1	Ethernet TX+
2	Ethernet RX+
3	Ethernet TX-
4	Ethernet RX-

TECH SPECS, PV-U150W-TSA5



TECH SPECS, PV-U150W-TSA5

PART NUMBER		DRAWING NUMBER		REVISION	
78020680		78020680		A3	
SCALE		SHEET SIZE		SHEET	
1:1.25 AND NOTED		A2		4 OF 4	