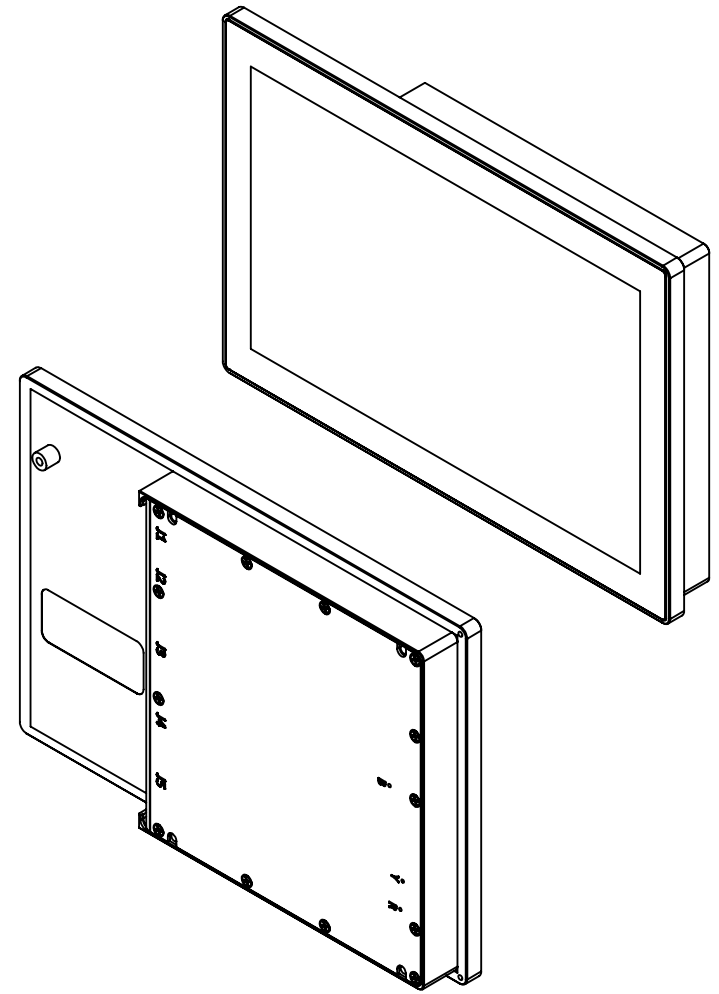
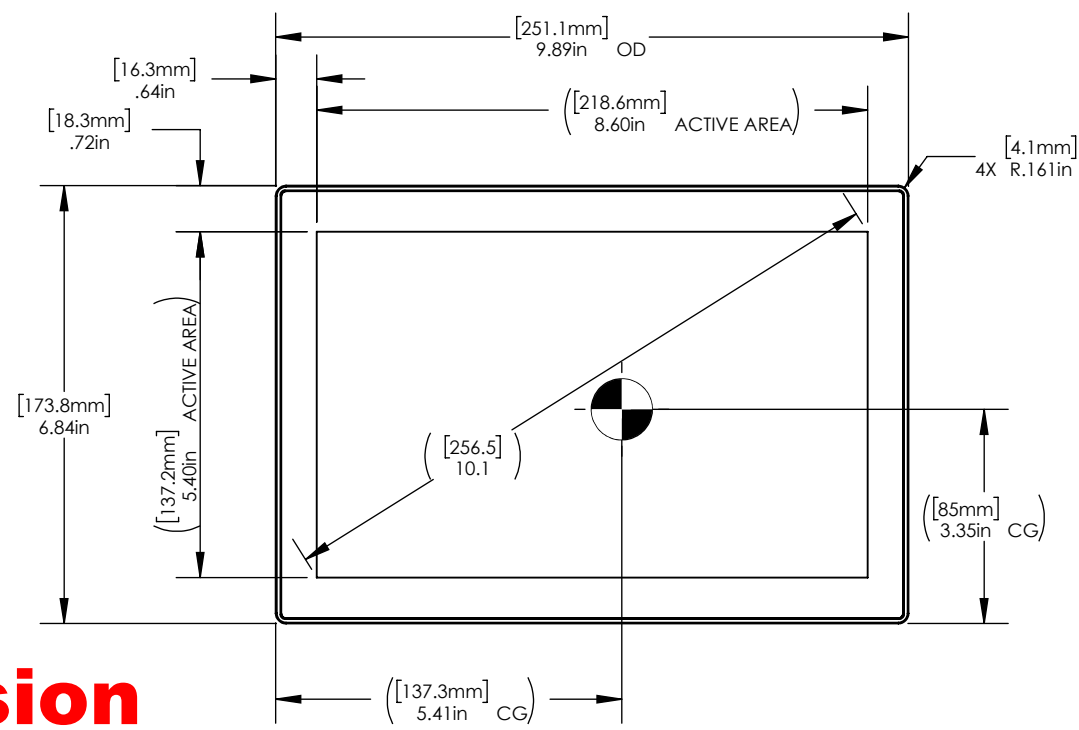


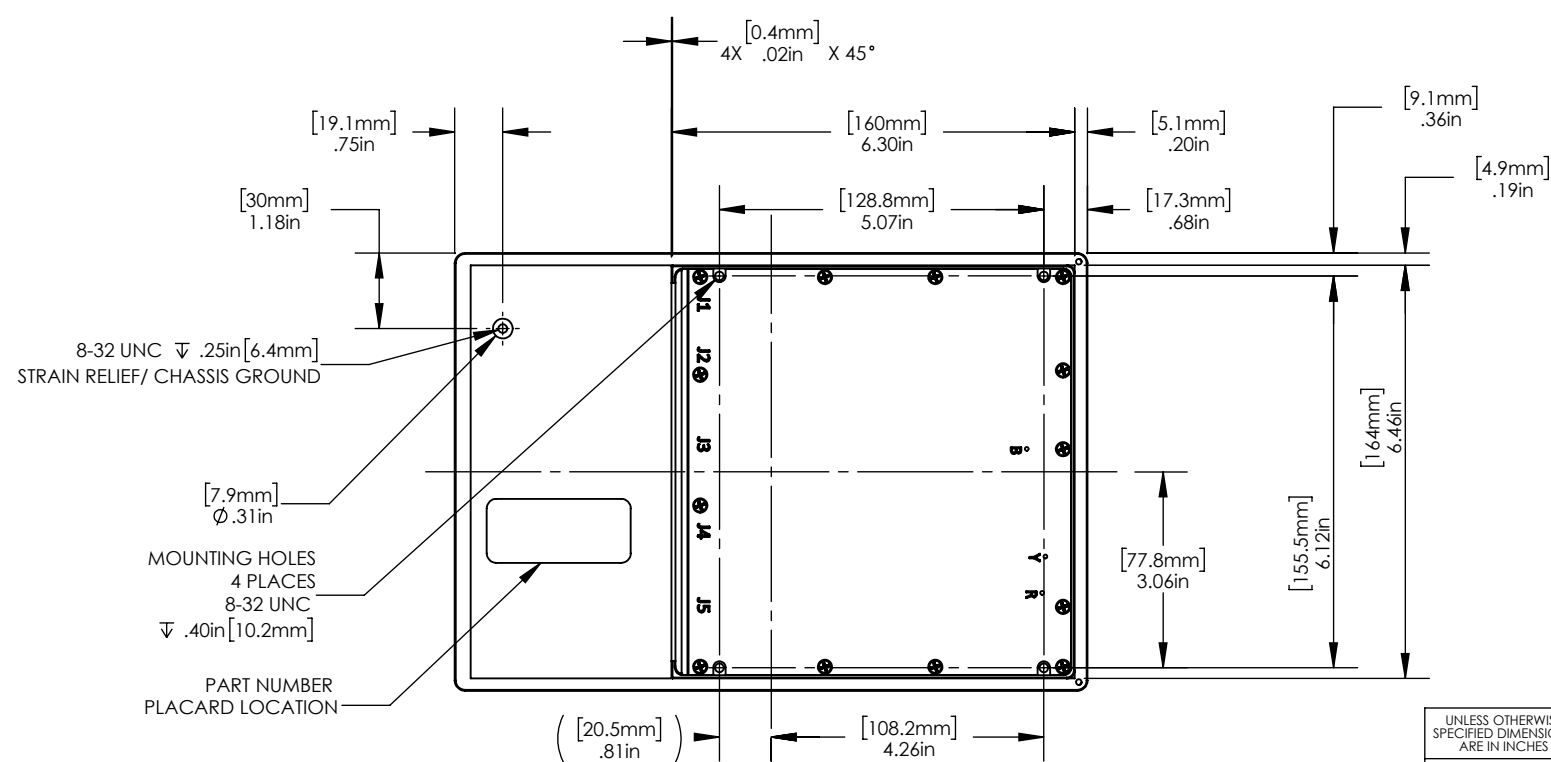
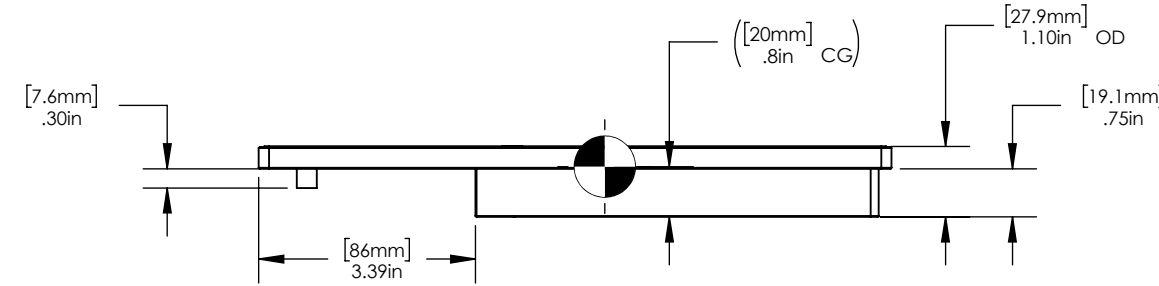
NOTES (SHEET 1)

- 1. ASSEMBLY WEIGHT 2.5 LBS MAX
- 2. USE ESD SAFE HANDLING PRACTICES PER ANSI / ESD 520.20
- 3. SOME MINOR PARTS, LABELS, AND INSTRUCTIONS OMITTED FOR CLARITY
- 4. VENTING / CLEARANCE: NATURAL CONVECTION, 1/8" CLEARANCE TO BACK AND SIDES OF UNIT
- 5. MINIMUM 4 EACH 8-32 FASTENERS REQUIRED FOR MOUNTING
- 6. CONNECTOR KITS NOT INCLUDED
- 7. SEE QUALITY CONTROL PLAN, IF APPLICABLE, FOR ANY SPECIAL PROCESSES, CRITICAL ITEMS, OR KEY CHARACTERISTICS THAT MAY EXIST
- 8. METRIC DIMENSIONS ARE FOR REFERENCE ONLY

REVISIONS					
ZONE	REV	DESCRIPTION	DATE	BY	EC NO
	3.0	CHANGE ORIENTATION FROM PORTRAIT	06/22/17	SC	NEC17-0421
	A	INITIAL PRODUCTION RELEASE, ADD CENTERLINES, UPDATE WEIGHT, ADD VIDEO RESOLUTIONS, ADDED SH2 NOTE 10	02/23/18	MCS	18-0130
SH2 Notes	B	UPDATE SHEET 2, NOTE 4, WAS 2V P-P	03/15/18	MCS	18-0175
	C	ADD "MODEL" AND "CPN" TO TITLE BLOCK	11/09/18	SC	18-0763



Electronic Revision
Controlled



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ROSEN AVIATION		1020 OWEN LOOP SOUTH EUGENE, OREGON 97402 TEL: (541) 342-3802 FAX: (541) 342-4912		APPROVALS	INITIAL	DATE
TITLE OUTLINE AND INSTALLATION DRAWING, 10.1" TOUCHSCREEN DISPLAY MODULE FIRST CALLED FOR: (FCF) 360-10.1 STD M				DRAWN BY	SC	02/22/17
				CHECKER	MCS	02/22/18
				ENGINEER	SC	02/22/18
CUSTOMER PART NUMBER (CPN)				SDM100-001-CD		
SIZE	MODEL	REV				
B	SDM100-001	C				
SCALE: 1:3		SHEET 1 OF 2				

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
 .X = ±.1
 .XX = ±.03
 .XXX = ±.015
 ∠ = ±5.0°
 RADII ±.020
 INTERPRET DIM AND TOL PER ASME Y14.5M - 1994

NOTES (SHEET 2)

- LCD MANUFACTURER'S SPECIFICATIONS
- WITH INTEGRATED TOUCH SCREEN
- CURRENT DRAW WILL INCREASE AS VOLTAGE DECREASES (CONSTANT POWER)
- AUDIO OUTPUT IS LINE LEVEL (2V-RMS) BUT CAN BE ADJUSTED. SEE TECH MANUAL FOR DETAILS
- GROUND-ON, OPEN-ON, AND MOMENTARY POWER MODES WILL TOGGLE POWER TO THE PANEL'S BACKLIGHT
- DEFAULT POWER MODE IS AUTO-ON
- SELECTS THE CURRENTLY DISPLAYED APPLICATION FROM THOSE LISTED IN THE HORIZON BAR
- PROGRAMMABLE I/O. SEE TECH MANUAL
- GROUND FOR AUDIO MUTE (PILOT OVERRIDE)
- SUPPORTED VIDEO RESOLUTIONS INCLUDE BOTH STANDARD SDI AND SDI SCRAMBLE PROTOCOL

Performance Specs

Screen Resolution ¹	1280 x 800
Display Viewing Area ¹	217 mm x 136 mm
Horizontal Viewing Angle ¹	±85
Vertical Viewing Angle ¹	±85
Contrast Ratio (Typical) ¹	700:1
Screen Brightness ²	380 cd/m2

Power Requirements

Operational Voltage Range	18 - 32 V
Max Current at Nominal Voltage ³	1 A
Inrush Peak	4.8 A
Inrush Duration	2 mS

Environmental Specs

Op Temperature	-15°C to +55°C
Altitude	15,000 ft
Humidity	95RH
Vibration	S (Curve B)
Power Input	DO-160G Cat Z(A)
Radio Frequency Susceptibility	DO-160G Cat T
Emission of RF Energy	DO-160G Cat M

Supported Video Resolutions¹⁰

480i@29.97	1080P@23.97
576i@25	1080P@24
720p@50	1080P@25
720P@59.94	1080P@29.97
720P@60	1080P@30
1080i@25	1080P@50
1080i@29.97	1080P@59.94
1080i@30	1080P@60

J1

SDI ¹⁰	
LRU CONNECTOR	
HD-BNC, JACK	

SUGGESTED MATE

TYPE	HDBNC
MATE	AMP - 034-1042
IMPEDANCE	75-Ohms

PIN FUNCTION

CENTER	3G-SDI
OUTER	3G-SDI RETURN

J2

SDI ¹⁰	
LRU CONNECTOR	
HD-BNC, JACK	

SUGGESTED MATE

TYPE	HDBNC
MATE	AMP - 034-1042
IMPEDANCE	75-Ohms

PIN FUNCTION

CENTER	3G-SDI
OUTER	3G-SDI RETURN

J3

MAIN CONNECTOR	
LRU CONNECTOR	
26 POS, DSUB-HD, MALE PINS	

SUGGESTED MATE

HOUSING	AMP - 1658682-1
CONTACT	AMP - 1658686-1
SHELL	3M - 3357-9215

Pin Signal

1	Return 28 VDC
2	28 VDC In
3	Chassis GND
4	Analog Audio Return ⁴
5	Analog Audio out Left ⁴
6	Analog Audio out Right ⁴
7	RS232 Control TX
8	RS232 Control RX
9	Signal GND
10	ARINC-429 in 1 A
11	ARINC-429 in 1 B
12	ARINC-429 in 2 A
13	ARINC-429 in 2 B
14	RS232 GPS TX
15	RS232 GPS RX
16	Signal GND
17	USB GND
18	Pwr Control in ⁵
19	Select in ⁶
20	Discrete out / Extra in ⁷
21	Audio Mute Control in ⁹
22	RS485+
23	RS485-
24	USB VBUS
25	USB D+
26	USB D-

J4

COMPOSITE	
LRU CONNECTOR	
HD-BNC, JACK	

SUGGESTED MATE

TYPE	HDBNC
MATE	AMP - 034-1042
IMPEDANCE	75-Ohms

PIN FUNCTION

CENTER	VIDEO SIGNAL
OUTER	VIDEO RETURN

J5

ETHERNET	
LRU CONNECTOR	
15 POS, DSUB-HD, MALE	

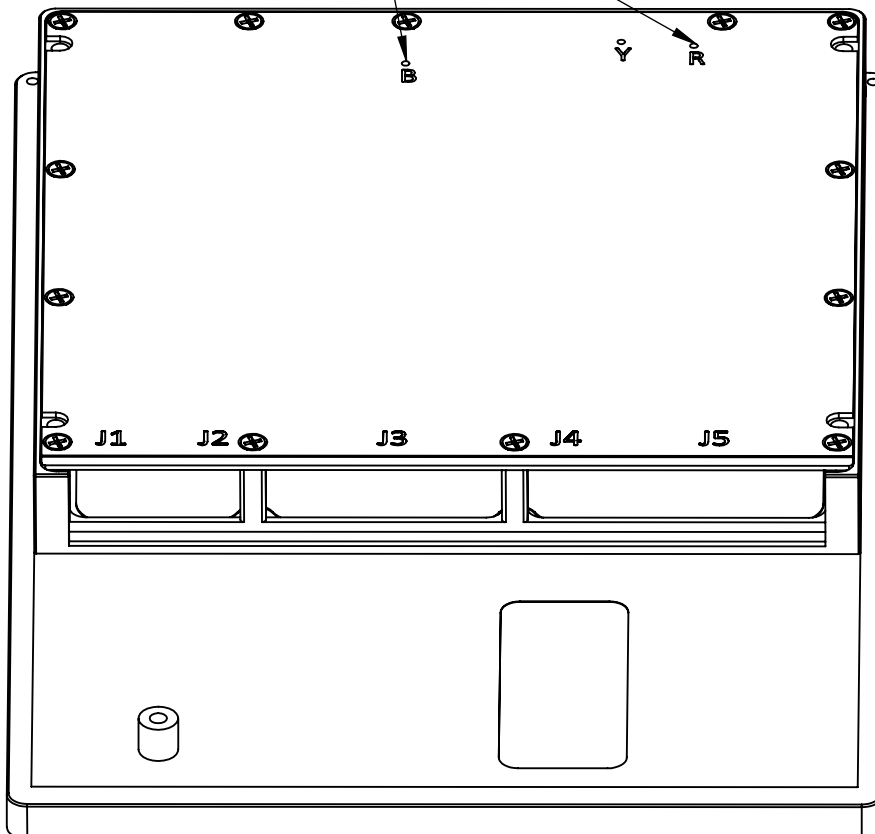
SUGGESTED MATE

HOUSING	AMP - 1658681-1
CONTACT	AMP - 1658686-1
SHELL	3M - 3357-9209

Pin Signal

1	ENET C+
2	CHASSIS GND
3	ENET B- (RX-)
4	ENET A- (TX-)
5	ENET D-
6	CHASSIS GND
7	ENET C-
8	ENET B+ (RX+)
9	ENET A+ (TX+)
10	ENET D+
11	IR in
12	IR +5V out
13	Signal GND
14	RS232 Debug TX
15	RS232 Debug RX

B AND R ACCESS HOLES FOR DEVELOPMENT ONLY



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	1020 OWEN LOOP SOUTH EUGENE, OREGON 97402 TEL: (541) 342-3802 FAX: (541) 342-4912	SIZE	CUSTOMER PART NUMBER (CPN)	REV
		B	SDM100-001-CD	C
SCALE: NTS		SHEET 2 OF 2		