

NOTES: (unless otherwise specified)

- 1. ASSEMBLY WEIGHT: 2.89 LBS. ±10%
- 2. OBSERVE ESD SAFE HANDLING PRACTICES
- 3. SOME MINOR PARTS AND LABELS OMITTED FOR CLARITY
- 4. INSTALL USING A MINIMUM OF SIX #8 FASTENERS
- 5. DO NOT BLOCK HOLES! A MINIMUM OF 4 SQUARE INCHES OF FREE AIR VENTILATION ACCESS TO VENT HOLES (2 SQUARE INCHES PER SIDE) IS REQUIRED TO PREVENT UNIT FROM OVERHEATING
- 6. CARE MUST BE TAKEN DURING INSTALLATION OR OPERATION TO PREVENT DEBRIS FROM ENTERING OPENINGS IN THE SHEET METAL HOUSING
- 7. CONNECTOR KITS NOT INCLUDED
- 8. POWER SHOULD BE SUPPLIED TO THE PRIMARY POWER +28 VDC PINS
- 9. AN OPTIONAL REDUNDANT POWER SUPPLY INPUT MAY BE APPLIED TO THE SECONDARY +28 VDC POWER PINS. IN THE EVENT OF A PRIMARY POWER SUPPLY FAILURE THE RMEB WILL UTILIZE THE SECONDARY POWER SUPPLY SOURCE

REVISIONS						
ZONE	REV	DESCRIPTION	DATE	BY	CHG NO	APRV
	1.0	INITIAL RELEASE	04/13/12	MCS		
	A	RELEASE TO PRODUCTION	09/20/12	DE	12-0517	
	B	UPD P1 CONNECTOR TABLE	10/12/12	DE	12-0587	JDE
PG3	C	ADD NOTE TO CON P3 DO NOT CONNECT TO A/C PWR	03/21/13	DE	13-0113	BEF
PG2	D	ADD 55" RDM TO PERFORMANCE SPEC CHART	05/14/14	DE	14-0186	BEF

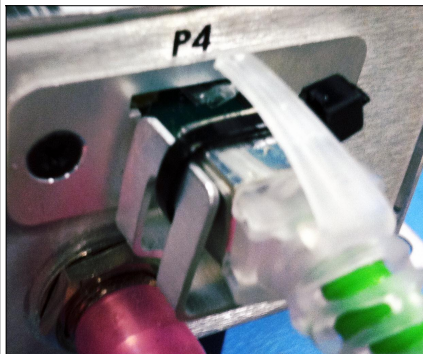
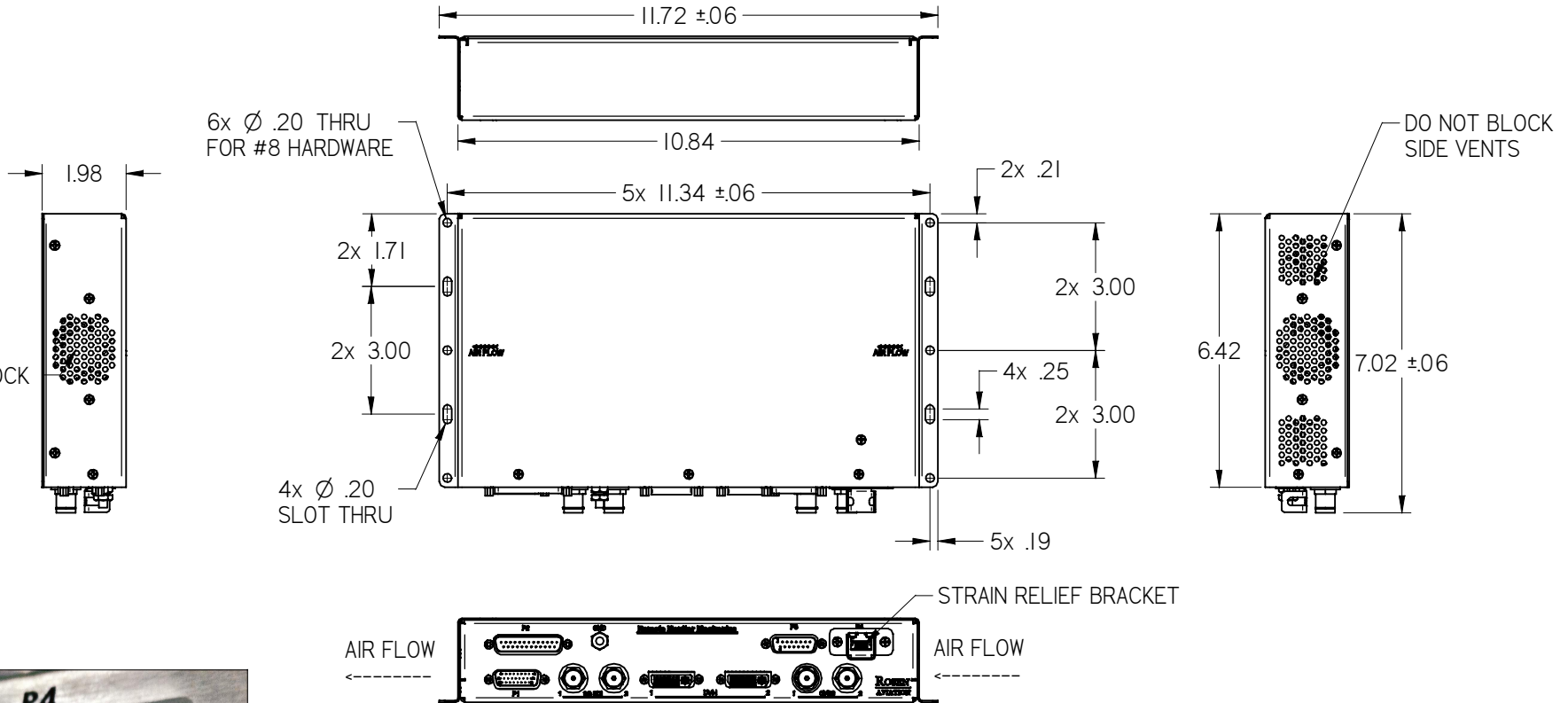
# ELECTRONIC REVISION CONTROLLED

A

A

B

B



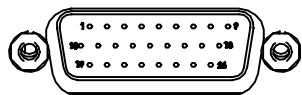
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<b>Rosen AVIATION</b>		1020 OWEN LOOP SOUTH EUGENE, OREGON 97402 TEL: (541) 342-3802 FAX: (541) 342-4912		APPROVALS	INITIAL	DATE
				DRAWN BY	MCS	04/13/12
				CHECKER	DE	09/06/12
				ENGINEER	MCS	09/06/12
TITLE <b>OUTLINE &amp; INSTALLATION DRAWING, REMOTE MONITOR ELECTRONICS BOX (RMEB)</b>				DWG NO 0700-107-CD		
FIRST CALLED FOR: (FCF)				SIZE A	REV D	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES				SCALE	N.T.S.	SHEET 1 OF 2
.X = ± .1 .XX = ± .03 R = ± 5.0° RADII = ± .020 INTERPRET DIM AND TOL PER ASME Y14.5M - 1994						

**P1 - Connector**

Connector Type: HD-26 Male	
Mate: HD-26 Female Tyco 1658682-1	
Contact: 1658686-3	
Connector Kit: 0300-043	
Pin #	Function
1	IR+5V_OUT
2	RS-485 ID (A) / SELECT SW
3	RS-485 ID (B)
4	PWR_Control_In
5	Reserved
6	GND
7	Discrete Relay Output / Error State*
8	GND
9	GND
10	RS-232 Control GND
11	RS-232-TX CONTROL
12	RS-232-RX CONTROL
13	RS-485-P
14	RS-485-N
15	RS-485-P
16	RS-485-N
17	GND
18	EXT_IR-IN
19	Reserved
20	NC
21	Reserved
22	Discrete Relay Input / Error State *
23	RS-485 ID (C) / RC Enable
24	RS-232-TX DEBUG
25	RS-232-RX DEBUG
26	RS-232 DEBUG GND

\* When in error state the two pins close (example: Over Temp)



**P1**  
DETAIL A

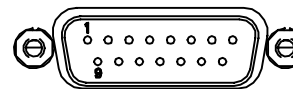
**P2 - CONNECTOR**

Connector: 25 Pin Male D-Subminiature	
TY CO 5747842-3	
Mate: 25 Pin Female D-Subminiature	
TYCO 207463-1	
Contact: 166051-1	
Connector Kit: 0300-052	
Pin #	Monitor signal
1	+28 VDC Primary
2	28 VDC RETURN
3	Reserved
4	Reserved
5	Reserved
6	Reserved
7	Reserved
8	Reserved
9	Reserved
10	Reserved
11	Reserved
12	Reserved
13	Reserved
14	Reserved
15	+28 VDC Primary
16	28 VDC RETURN
17	Reserved
18	+28 VDC Primary
19	28V DC RETURN
20	+28 VDC Secondary
21	+28 VDC Secondary
22	+28 VDC Secondary
23	Reserved
24	Reserved
25	CHASSIS GND

**P3 - Connector  
(To Remote Monitor)**

Connector Type: DB-15 Male	
Mate: DB-15 Female	
Tyco 205205-2	
Contact: 66504-3	
0300-053	
Pin #	Function
1	SENSE_POS
2	PWR_POS ***
3	PWR_POS ***
4	PWR_POS ***
5	PWR_POS ***
6	Reserved
7	GND
8	RS232_RX
9	SENSE_NEG
10	PWR_NEG
11	PWR_NEG
12	PWR_NEG
13	PWR_NEG
14	IR
15	RS232_TX

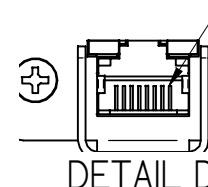
\*\*\* DO NOT CONNECT THESE PINS TO AIRCRAFT POWER



DETAIL C

**P4 - Connector  
(To Remote Monitor)**

Connector Kit: 0300-050	
Connector Type: RJ-45 RECEPTACLE	
Pin #	Function
1	CAT6 +12V
2	GND
3	CAT6_HTPDN
4	CAT6_TX0_N
5	CAT6_TX0_P
6	CAT6_LOCKN
7	CAT6_TX1_N
8	CAT6_TX1_P
HOUSING GND	



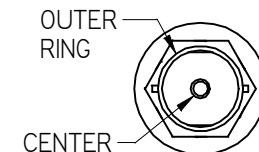
DETAIL D

**CVBS Connectors**

Connector Type: BNC	
Connector Kit: 0300-051	
Input Impedance is 75-Ohms	
Pin #	Function
Center Pin	CVBS - (Composite)
Outer Ring	CVBS Return

**SDI Connectors**

Connector Type: BNC	
Connector Kit: 0300-051	
Input Impedance is 75-Ohms	
Pin #	Function
Center Pin	SDI - (3G/HD/SD)
Outer Ring	SDI Return



DETAIL E

**PERFORMANCE SPECIFICATIONS (REF)**

LCD Performance Supported	
Video Formats	480i/576i through 1080p
VESA Formats	VGA through WUXGA

**Power Requirements**

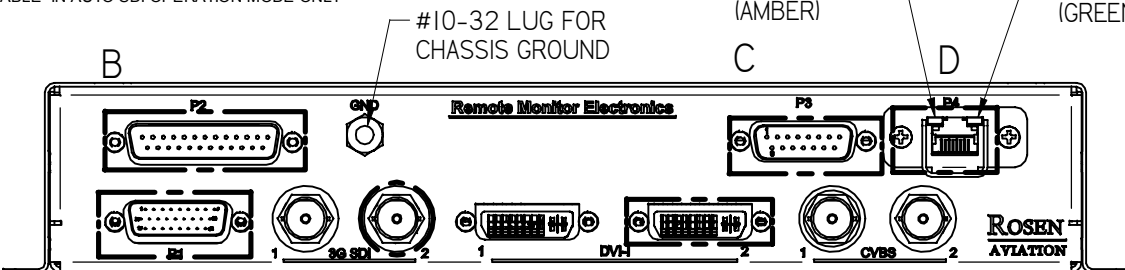
Nominal Voltage/Current (19")	28V / 1.3 AMP
Nominal Voltage/Current (22")	28V / 1.8 AMP
Nominal Voltage/Current (24")	28V / 1.8 AMP
Nominal Voltage/Current (26")	28V / 2.2 AMP
Nominal Voltage/Current (32")	28V / 3.3 AMP
Nominal Voltage/Current (42")	28V / 4.8 AMP
Nominal Voltage/Current (55")	28V / 4.3 AMP
Inrush Peak	20 Amp
Inrush Duration	100 micro-Sec
Op Voltage Range	18-32 VDC
Maximum Current Draw	10 AMPS
Power Dissipation	60W MAX
Power Delivered To Remote Monitor	120W MAX

**Environmental Specifications**

Operating Temperature	DO-160F Cat A1 (-15 to 55°C)
Altitude	15,000ft
Humidity	95%RH
Vibration	1.48 grms
Power Input	DO-160F Cat Z(A)
Radio Frequency Susceptibility	DO-160F Cat T
Emission of RF Energy	DO-160F Cat M

RS-485 CONFIGURATION DISCRETES **			RS-485 ADDRESS
RS-485 ID (A)	RS-485 ID (B)	RS-485 ID (C)	
OPEN	OPEN	OPEN	1
OPEN	OPEN	GND	2
OPEN	GND	OPEN	3
OPEN	GND	GND	4
GND	OPEN	OPEN	5
GND	OPEN	GND	6
GND	GND	OPEN	7
GND	GND	GND	8

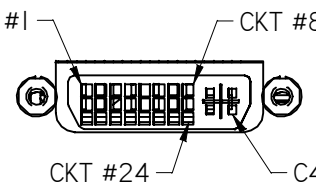
\*\* AVAILABLE IN AUTO-SDI OPERATION MODE ONLY



A E F

**Component/Digital Connector**

Connector Type: DVH Receptacle			
Analog RGB/H/V and Analog Component Video			
Connector Kit: 0300-029			
Digital DV/HDMI Audio & Video			
Pin #	Function	Pin #	Function
1	TMDS Data2-	16	Hot Plug Detect
2	TMDS Data2+	17	TMDS Data0-
3	TMDS Data2 Shield	18	TMDS Data0+
4	Reserved	19	TMDS Data0 Shield
5	Reserved	20	Reserved
6	DDC Clock [SCL]	21	Reserved
7	DDC Data [SDA]	22	TMDS Clock Shield
8	Analog Vertical Sync	23	TMDS Clock +
9	TMDS Data1-	24	TMDS Clock -
10	TMDS Data1+	C1	Analog Red (or Component Pr)
11	TMDS Data1/3 Shield	C2	Analog Green (or Component Y)
12	TMDS Data3-	C3	Analog Blue (or Component Pb)
13	TMDS Data3+	C4	Analog Horizontal Sync
14	+5 V Power	C5	Analog GND Return: ( RGB or YPbPr)
15	Ground (for +5 V)		



DETAIL F

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	SCALE NONE	SHEET 2 OF 2	