

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

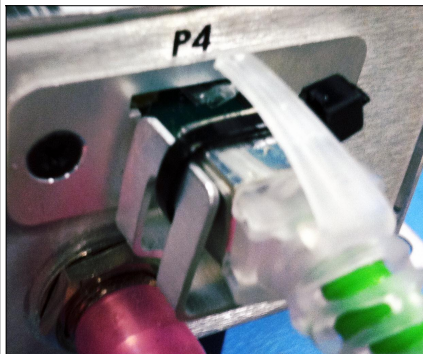
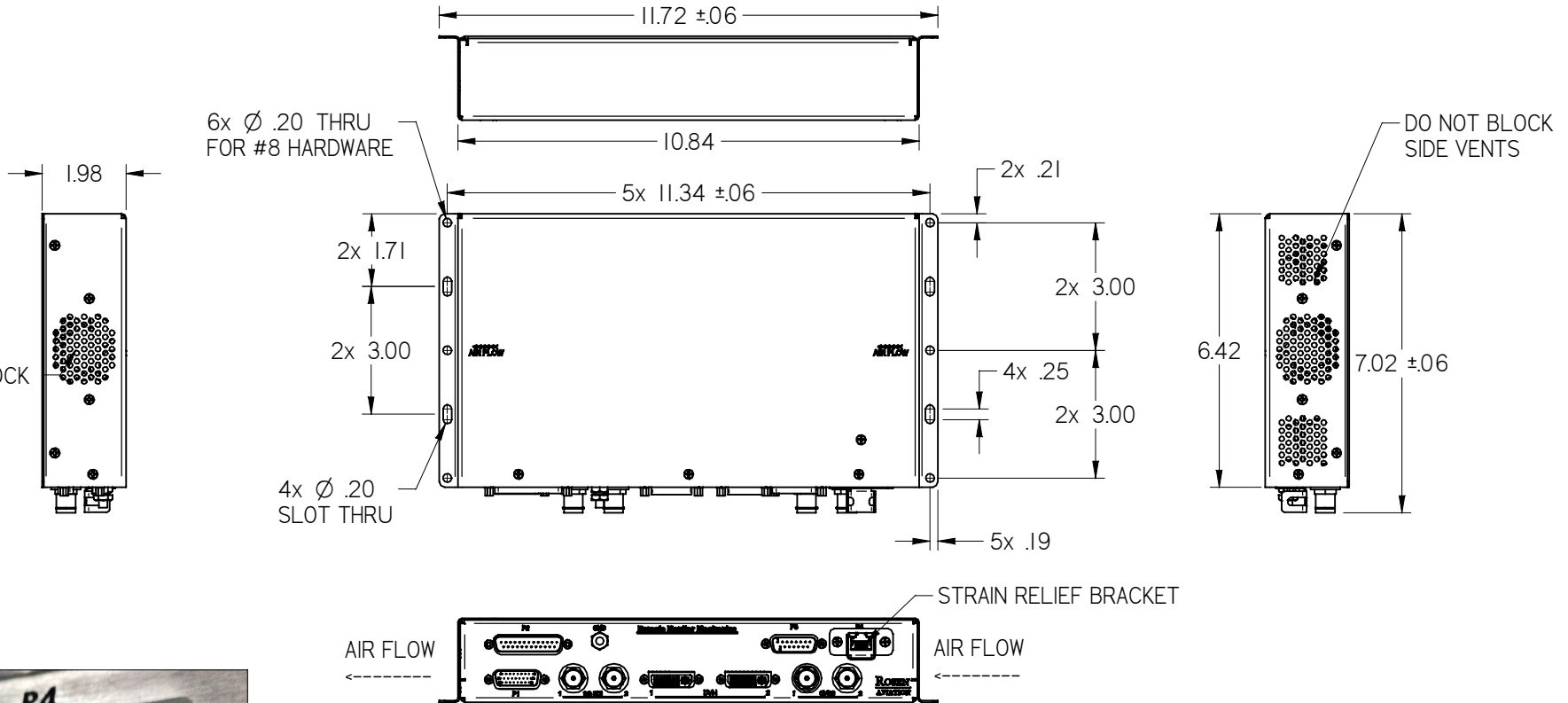
ELECTRONIC REVISION CONTROLLED

A

A

B

B



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Rosen AVIATION		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	
DWG NO 0700-107-CD			
SIZE A		REV D	
SCALE	N.T.S.	SHEET	1 OF 2

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
.X = ± .1
.XX = ± .03
∅ = ± 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

P2 - CONNECTOR

Connector: 25 Pin Male D-Subminiature	
TYCO 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

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

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

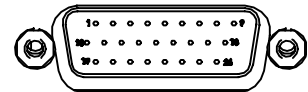
PERFORMANCE SPECIFICATIONS (REF)

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

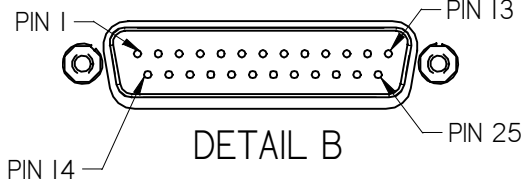
Power Requirements	
Nominal Voltage/Current (19")	28V / 1.3 AMP
Nominal Voltage/Current (22")	28V / 1.8 AMP
Nominal Voltage/Current (24")	28V / 1.8 AMP
Nominal Voltage/Current (26")	28V / 2.2 AMP
Nominal Voltage/Current (32")	28V / 3.3 AMP
Nominal Voltage/Current (42")	28V / 4.8 AMP
Nominal Voltage/Current (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

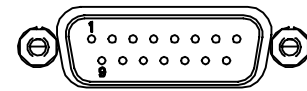
* When in error state the two pins close (example: Over Temp)



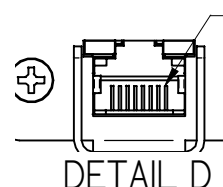
P1
DETAIL A



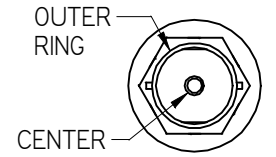
DETAIL B



DETAIL C



DETAIL D



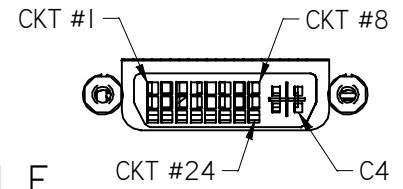
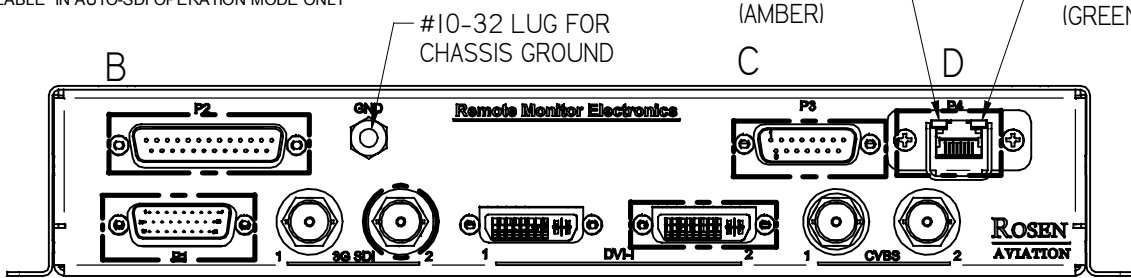
DETAIL E

*** DO NOT CONNECT THESE PINS TO AIRCRAFT POWER

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

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	