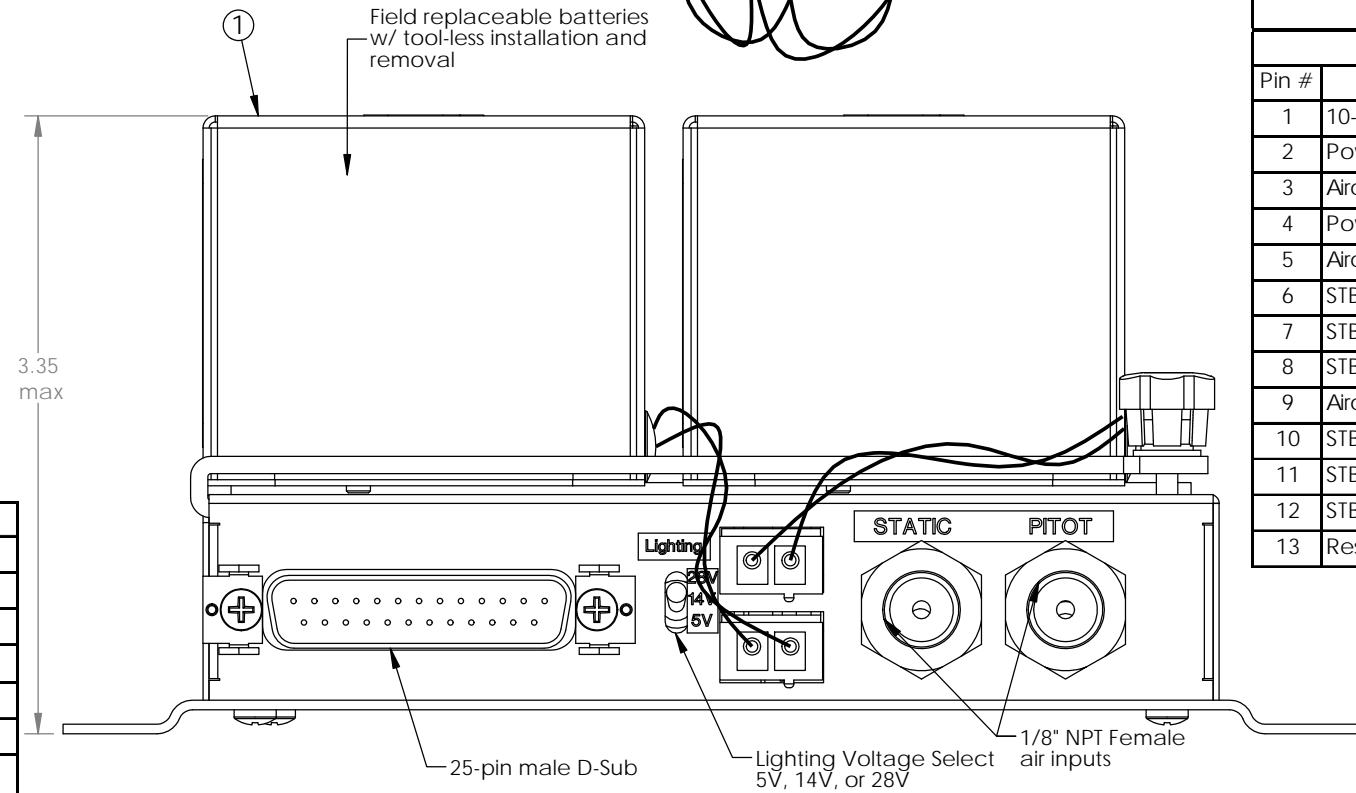
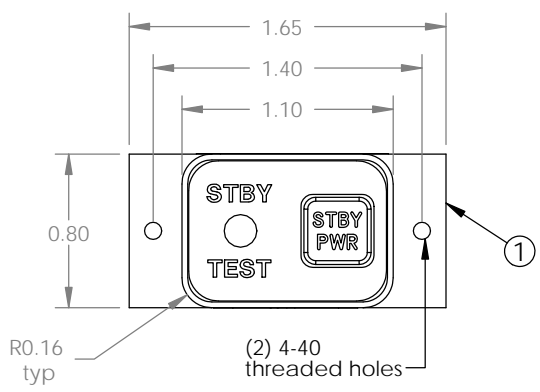
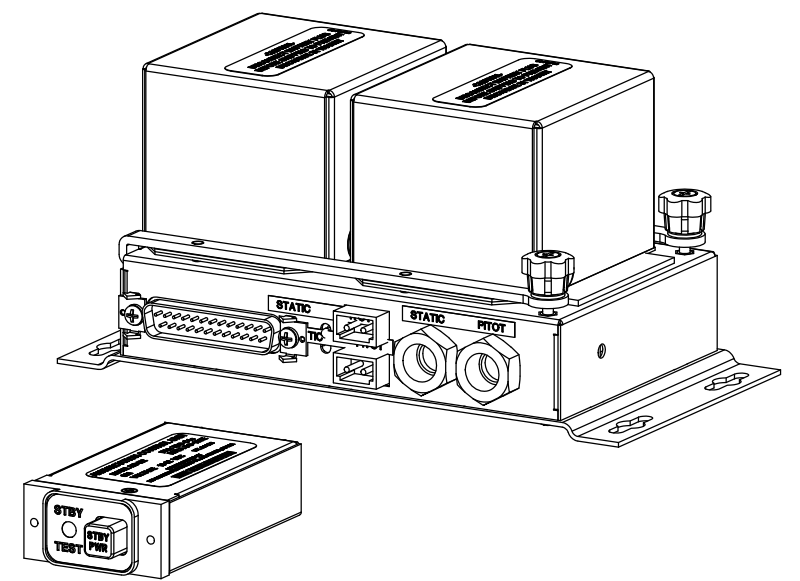
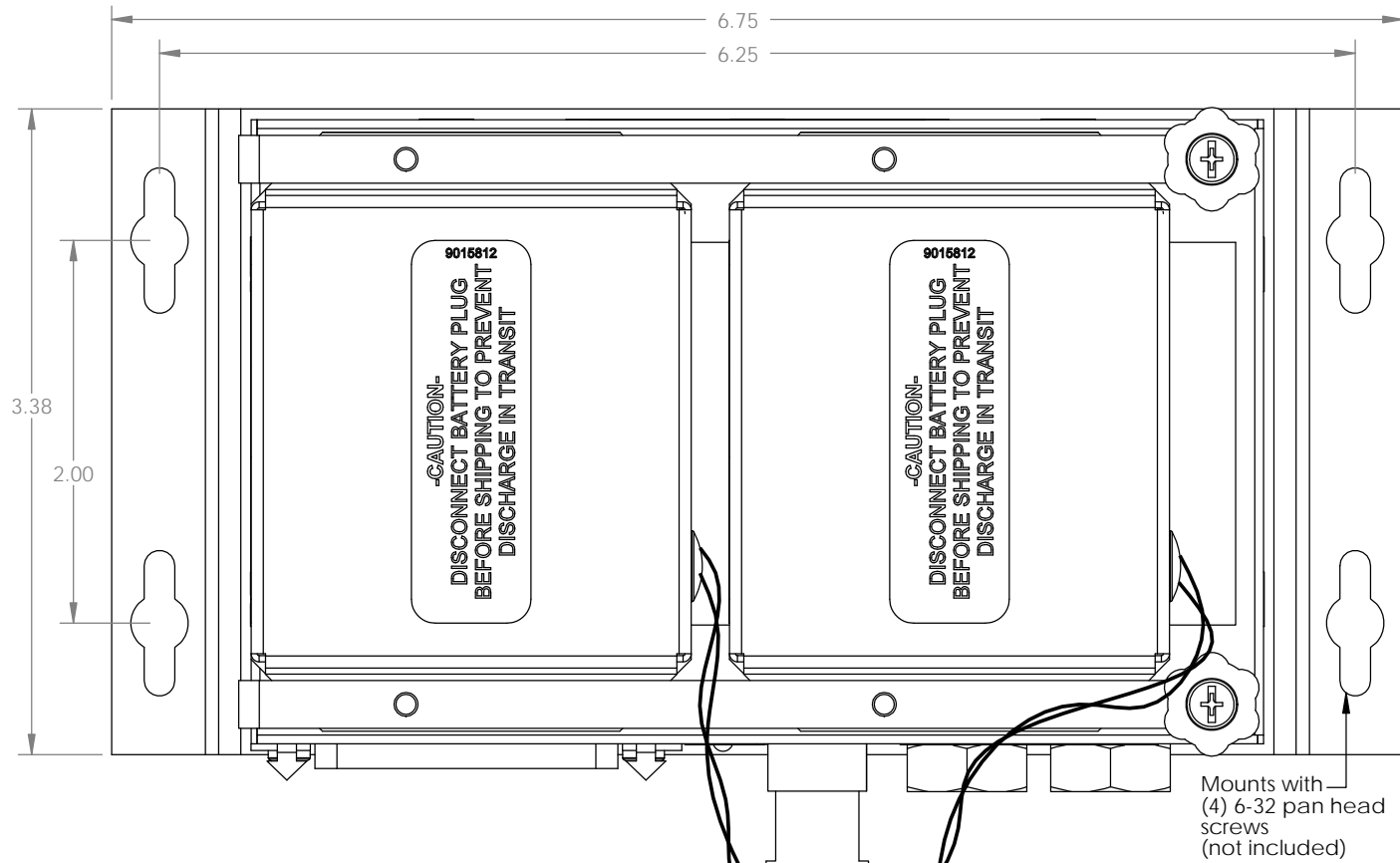
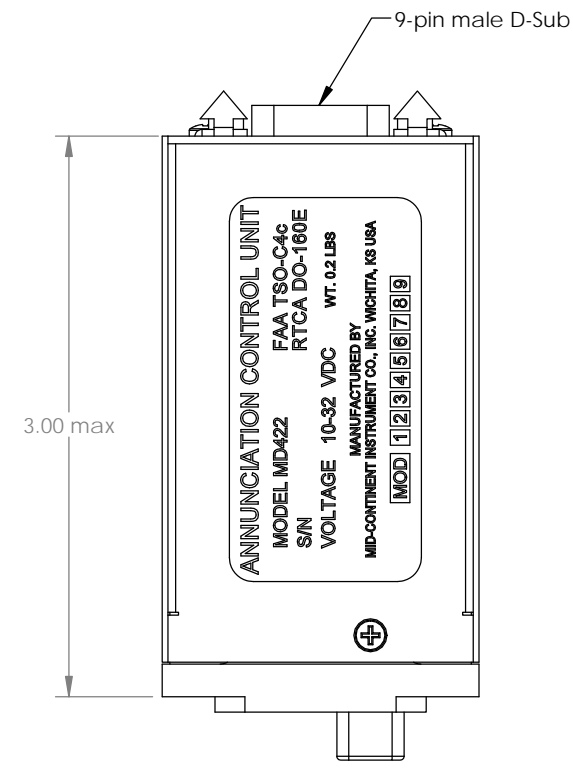


Configuration	
Dash #	

Revision				
ECO	Rev.	Description	Date	Approved
	A	Production release.	11/27/06	MCH/BAW
4758	B	Revise Pinout description.	12/5/06	MCH/BAW
5286	C	'Certification' section was pending. Added 'Power Output', and 'Output Capacity'. Deleted 'Current Rating'.	9/23/09	JDS/MKN
5823	D	Logo update and addition of model number.	08/24/12	BMC/BCM



MD420 BACKUP BATTERY SYSTEM PINOUT					
BATTERY MODULE PINOUT			ANNUNCIATOR PINOUT		
Pin #		Pin #		Pin #	
1	10-32VDC Power Input	14	Reserved	1	Annun. Green
2	Power Out	15	Reserved	2	Annun. Sensor
3	Aircraft Power GND	16	Reserved	3	Annun. GND
4	Power GND	17	Reserved	4	Annun. Red
5	Aircraft Lighting Bus	18	Air Switch	5	Annun. Yellow
6	STBY Lighting Bus	19	Annun. Green		
7	STBY Lighting Bus	20	Annun. Red		
8	STBY Lighting Bus	21	Annun. Yellow		
9	Aircraft Lighting GND	22	Annun. White		
10	STBY Lighting GND	23	STBY PWR Switch		
11	STBY Lighting GND	24	Annun. Sensor		
12	STBY Lighting GND	25	Annun GND		
13	Reserved				

SPECIFICATIONS	
Model Number	TS420
Power Input	10 to 32 VDC
Power Output	18V nominal @ 1.8A max
Output Capacity	1.0 AH @ 0.05C rate
Weight	3.1 lbs (battery module) 0.2 lbs (annunciator)
Certification	FAATSO-C4c and RTCA DO-160E RTCA DO160E Environmental Category D1S2AER(B1G)XXXXXXZZAZ[ZC][WF]M[A3H33]XXAX
Mating Connector	MD25F20JVL0 25-pin D-Sub female or equivalent MD9F20JVL0 9-pin D-Sub female or equivalent
Annunciator Lighting	LED Backlit, automatic internal dimming
Battery Charging	Automatic recharging when main power is present
Compatibility	Supplies backup power to Mid-Continent Instruments Electric Attitude Indicator Model 4200 or 4300 and lighting power to two (2) additional

OPERATION		
Battery Annunciation	STBY PWR Button: White (LED backlit)	Press and hold to test battery Press to manually activate battery
	STBY Text: Amber	Flashes bright for 1 minute after power loss in manual mode Steady dim state when operating on battery power
	TEST Text: Green or Red	Indicates Pass/Green or Fail/Red during battery test

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES.
 TOLERANCE:
 FRACTIONAL = ±1/64
 .XX = ±0.015
 .XXX = ±0.005
 .XXXX = ±0.002
 ANGULAR = ±0.5°
 CONCENTRICITY = 0.005 TIR
 BREAK ALL SHARP EDGES
 THREADS PER MIL-S-7742

DRAWN:
BAW
4/14/06

APPROVED:
M. Hawks
11/2/2006

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TITLE:
Battery Backup System

SCALE: 1:1 DO NOT SCALE THIS DRAWING

TRUE BLUE POWER
 A division of Mid-Continent Instrument Co., Inc.

PART NUMBER:
MD420

SHEET: 1 of 1

Item	Qty	Part Number	Description
1	1	MD421	Battery Module, MD420 System
2	1	MD422	Annunciator Control Unit, MD420 System
3	1	7014517	Connector Kit, 25-pin
4	1	8017287	Connector Kit, 9-pin