JA71-xxx

Dzus Blanking Plate

Installation Manual

Rev. A

Jupiter Avionics Corporation
1959 Kirschner Road
Kelowna BC
Canada V1Y 4N7
Tel: 778-478-2232
Toll-Free: 855-478-2232
www.jupiteravionics.com

Copyright 2013 Jupiter Avionics Corp.

All rights reserved

Jupiter Avionics Corporation (JAC) permits a single copy of this manual to be printed or downloaded for the express use of an installing agency. Any such electronic or printed copy of this manual must contain the complete text of this copyright notice. Any unauthorized commercial distribution of this manual is strictly prohibited. Except as described above, no part of this manual may be reproduced, copied, transmitted, disseminated, downloaded, or stored in any storage medium for any purpose without the express prior written consent of JAC.

IMPORTANT:

Information in this document is subject to change without notice.

To confirm the current revision status of this manual, visit the JAC website:

www.jupiteravionics.com

RECORD OF REVISIONS			
Revision	**Rev Date**	**Description**	**ECR**
A	Jan 2013		2133

Prepared:	Checked:	Approved:
MPB	JAC 02-25-13 SRM	JAC 02-25-13 KDV

Table of Contents

SECTION 1 - DESCRIPTION 1
1.1 System Overview 1
1.2 Features Overview 1
1.4 Specifications 1
1.4.1 Mechanical Specifications 1
1.4.2 Product Naming Convention 1
1.4.3 Environmental Specifications 1
SECTION 2 – INSTALLATION 2
2.1 Introduction 2
2.2 Continued Airworthiness 2
2.3 Unpacking and Inspecting Equipment 2
2.3.1 Warranty 2
2.4 Installation Procedures 2
2.4.1 Mechanical Installation 2
2.6 Installation Kit 2
2.7 Installation Drawings 2
Appendix A - Installation Drawings A1
A1 Installation Drawings A1
A2 Qualification Form A1

SECTION 1 - DESCRIPTION

1.1 System Overview

The JA71 Dzus Blanking Plate allows the aircraft owner /operator to fill a void in a Dzus rail equipment rack with a compatible color and sized cover plate. The Dzus blanking plate reduces the amount of debris and dust entering the equipment rack.

1.2 Features Overview

The JA71 is painted with a baked-on urethane finish to resist scratches and nicks during use. The JA71 comes in 7 different heights ranging from 1 Dzus hole (JA71-xx1) to 7 Dzus holes (JA71-xx7). The rear side is milled out to accommodate switches or a printed circuit board. The design and color can match existing equipment to present a professional look and feel to the instrument panel.

1.4 Specifications

1.4.1 Mechanical Specifications

	Height (Max)	Weight (Max)	Dzus Fasteners
JA71-x01	0.375 in (9.52 mm)	0.06 lbs (0.03 kg)	Two
JA71-x02	0.750 in (19.05 mm)	0.07 lbs (0.03 kg)	Two
JA71-x03	1.125 in (28.58 mm)	0.11 lbs (0.05 kg)	Two
JA71-x04	1.500 in (38.10 mm)	0.13 lbs (0.06 kg)	Two
JA71-x05	1.875 in (47.62 mm)	0.17 lbs (0.08 kg)	Four
JA71-x06	2.250 in (57.12 mm)	0.19 lbs (0.09 kg)	Four
JA71-x07	2.625 in (66.68 mm)	0.21 lbs (0.10 kg)	Four

All versions:	Depth	0.32 in (8.1 mm) maximum
	Width	5.75 in (146.1 mm) maximum
	Material	6061-T6XX aluminum with flat urethane paint finish

1.4.2 Product Naming Convention

JA71 - x x x

Product Number

x = Color option
0 = Black FED-STD-37038
1 = Gray FED-STD-36231

x = Custom option

x = Height option
1 = 1 Dzus hole
2 = 2 Dzus hole etc.

1.4.3 Environmental Specifications

The JA71-xxx Blanking Plate has been qualified to the environmental conditions listed below. Environmental categories for which performance has been qualified are listed in the Environmental Qualification Form in Appendix A of this manual.

Shock, Crash Safety	20 g for 11 ms
Vibration	Cat SBM, Cat U2FF1

DO-160G Env. Cat. XXXB[(SBM)(U2FF1)]XXXXXXXXXXXXXXXXXX

SECTION 2 – INSTALLATION

2.1 Introduction

This section contains unpacking and inspection procedures and installation information.

2.2 Continued Airworthiness

Maintenance of the JA95-001 is on condition only. Scheduled inspection and/or periodic maintenance of this unit is not required.

2.3 Unpacking and Inspecting Equipment

Unpack the equipment carefully. Check for shipping damage and report any problems to the relevant carrier. Confirm that the Authorized Release Certificate or Certificate of Conformance is included. Complete the on-line warranty card from the Jupiter Avionics Corporation (JAC) website – www.jupiteravionics.com.

2.3.1 Warranty

All products manufactured by JAC are warranted to be free of defects in workmanship or performance for 2 years from the date of installation by an approved JAC dealer or agency. This warranty covers the cost of all materials and labour to repair or replace the unit, but does not include the cost of transporting the defective unit to and from JAC or its designated warranty repair centre, or of removing and replacing the defective unit in the aircraft. This warranty does not cover failures due to abuse, misuse, accident, or unauthorized alteration or repairs.

Contact JAC for return authorization, and for any questions regarding this warranty and how it applies to your unit(s). JAC is the final arbiter concerning warranty issues.

2.4 Installation Procedures

2.4.1 Mechanical Installation

The JA71-xxx can be mounted in any attitude and location. Ensure all Dzus fasteners are secured.

2.6 Installation Kit

N/A

2.7 Installation Drawings

The drawings and documents required for installation can be found in Appendix A of this manual.

Installation Manual

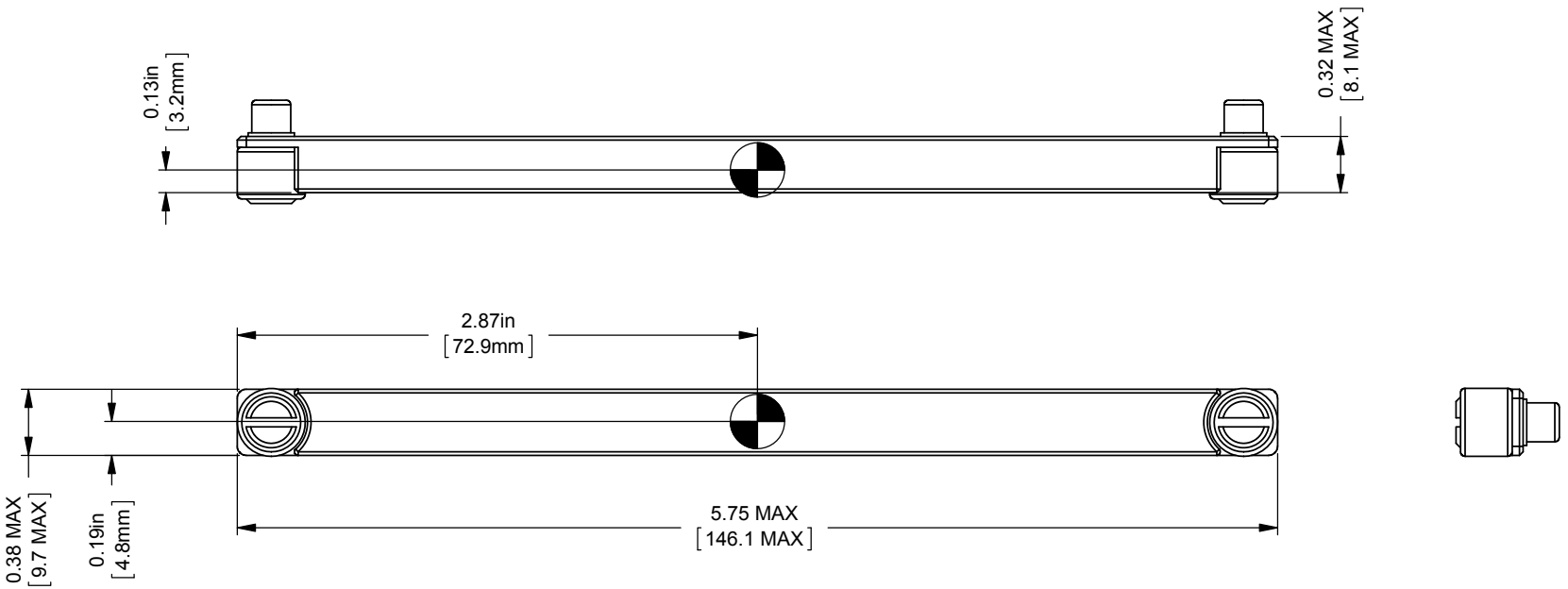
Appendix A - Installation Drawings

A1 Installation Drawings

DOCUMENT	Rev
JA71-001 Mechanical Installation	C
JA71-002 Mechanical Installation	C
JA71-003 Mechanical Installation	C
JA71-004 Mechanical Installation	C
JA71-005 Mechanical Installation	C
JA71-006 Mechanical Installation	C
JA71-007 Mechanical Installation	C

A2 Qualification Form

DOCUMENT	Rev
JA71-xxx Environmental Qualification Form	A



CENTER OF GRAVITY
±0.03in [0.8mm]

WEIGHT: 0.06 lbs [0.03 kg] MAX.

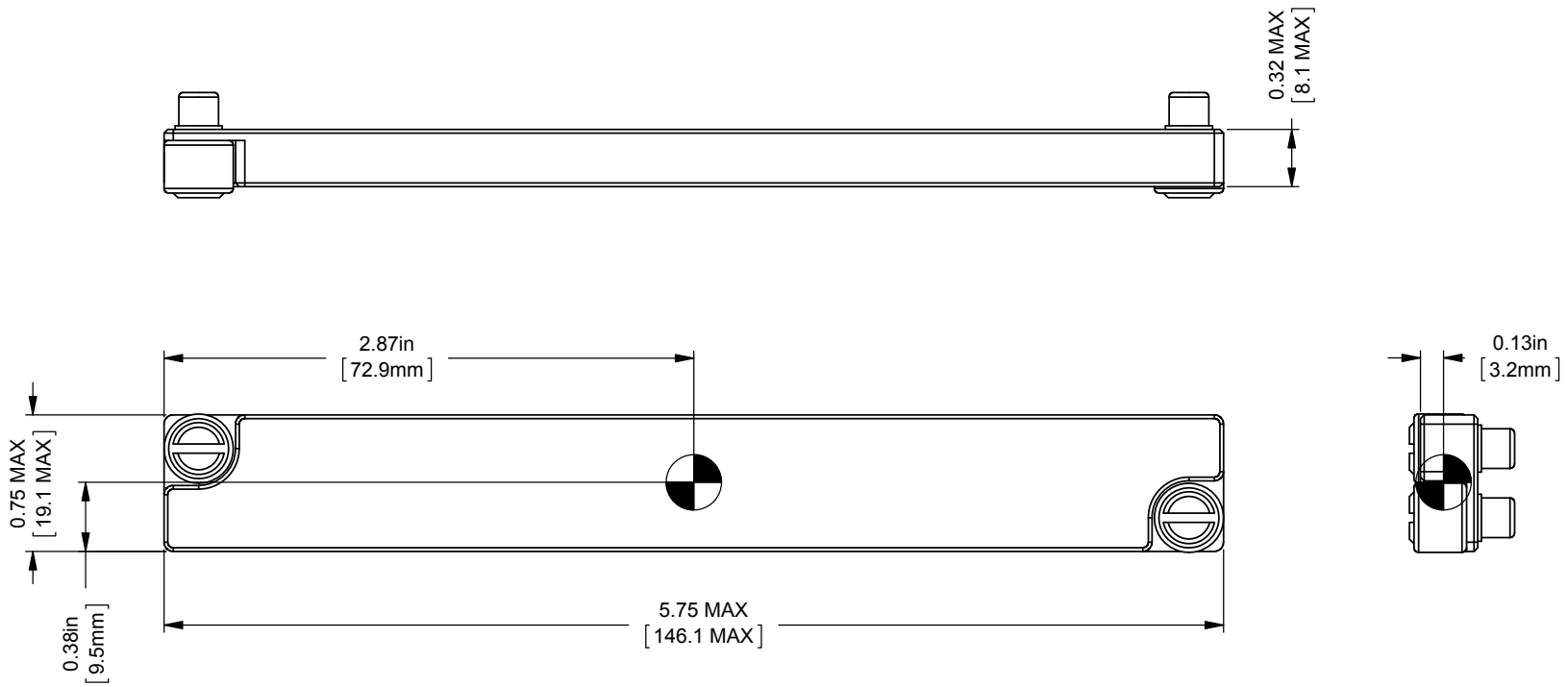
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ANGLES ARE IN DEGREES TOLERANCES: 1 DEC PLACE: ± 0.1 2 DEC PLACE: ± 0.01 3 DEC PLACE: ± 0.005 ANGLES: ± 0.5 DEG	PREPARED	TAT
	CHECKED	
	APPROVED	
MATERIAL: N/A	CONFIDENTIAL & PROPRIETARY TO JUPITER AVIONICS CORP.	
FINISH: N/A	DRAWING NOT TO SCALE	

JUPITER AVIONICS CORPORATION

TITLE: 1 Dzus Blanking Plate

NCAGE CODE	PART NO.	SHEET
L00N3	JA71-001	1/1

DOC. NO.
JA71-001 Mechanical Installation Rev C.SLDDRW



CENTER OF GRAVITY
±0.03in [0.8mm]

WEIGHT: 0.07 lbs [0.03 kg] MAX.

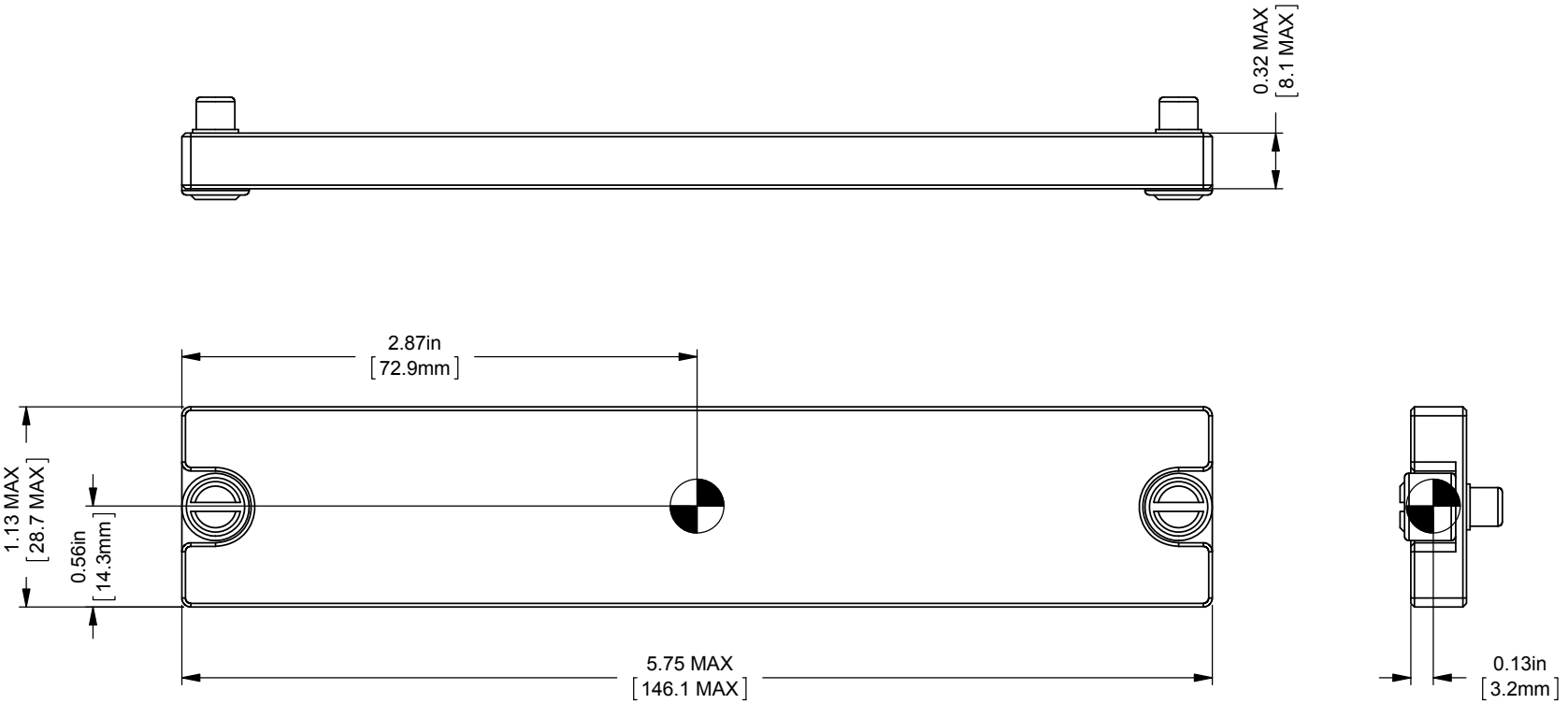
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ANGLES ARE IN DEGREES TOLERANCES: 1 DEC PLACE: ± 0.1 2 DEC PLACE: ± 0.01 3 DEC PLACE: ± 0.005 ANGLES: ± 0.5 DEG	PREPARED	TAT
	CHECKED	JAC 01-24-13 DS
	APPROVED	JAC 01-24-13 KDV
MATERIAL: N/A	CONFIDENTIAL & PROPRIETARY TO JUPITER AVIONICS CORP.	
FINISH: N/A	DRAWING NOT TO SCALE	

JUPITER AVIONICS CORPORATION

TITLE: 2 Dzus Blanking Plate

NCAGE CODE	PART NO.	SHEET
L00N3	JA71-002	1/1

DOC. NO.
JA71-002 Mechanical Installation Rev C.SLDDRW



CENTER OF GRAVITY
±0.03in [0.8mm]

WEIGHT: 0.11 lbs [0.05 kg] MAX.

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
ANGLES ARE IN DEGREES
TOLERANCES:
1 DEC PLACE: ± 0.1
2 DEC PLACE: ± 0.01
3 DEC PLACE: ± 0.005
ANGLES: ± 0.5 DEG

MATERIAL: N/A

FINISH: N/A

PREPARED	TAT	
CHECKED	JAC 01-24-13 DS	
APPROVED	JAC 01-24-13 KDV	

CONFIDENTIAL & PROPRIETARY TO JUPITER AVIONICS CORP.

DRAWING NOT TO SCALE

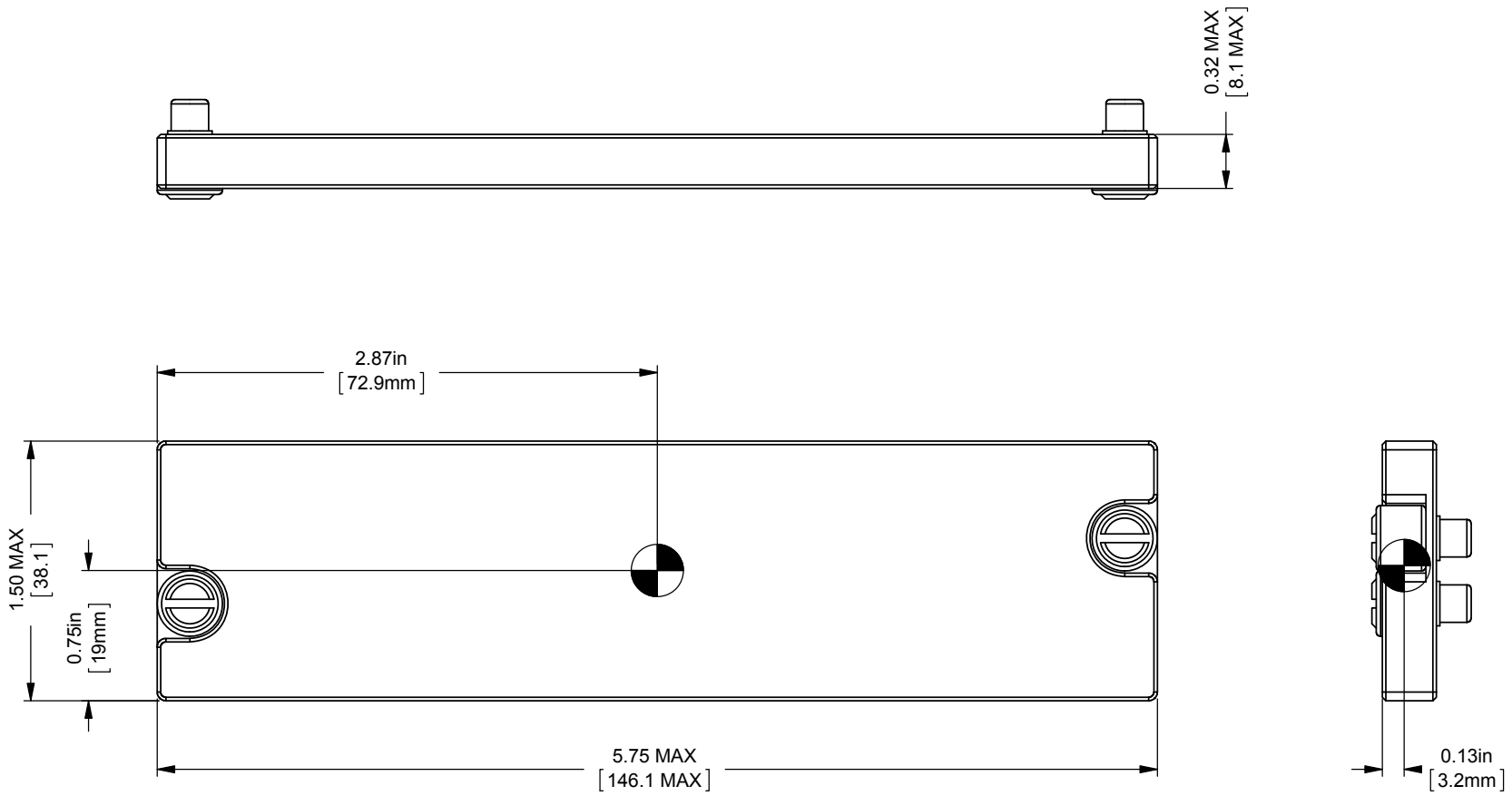
JUPITER AVIONICS CORPORATION

TITLE: 3 Dzus Blanking Plate

NCAGE CODE	PART NO.	SHEET
L00N3	JA71-003	1/1

DOC. NO.
JA71-003 Mechanical Installation Rev C.SLDDRW

JUPITER AVIONICS TEMPLATE SOLIDWORKS LANDSCAPE SIZEA REV B.DRWDOT



CENTER OF GRAVITY
±0.03in [0.8mm]

WEIGHT: 0.13 lbs [0.06 kg] MAX.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ANGLES ARE IN DEGREES TOLERANCES: 1 DEC PLACE: ± 0.1 2 DEC PLACE: ± 0.01 3 DEC PLACE: ± 0.005 ANGLES: ± 0.5 DEG	PREPARED	TAT
	CHECKED	JAC 01-24-13 DS
	APPROVED	JAC 01-24-13 KDV
MATERIAL: N/A	CONFIDENTIAL & PROPRIETARY TO JUPITER AVIONICS CORP.	
FINISH: N/A	DRAWING NOT TO SCALE	

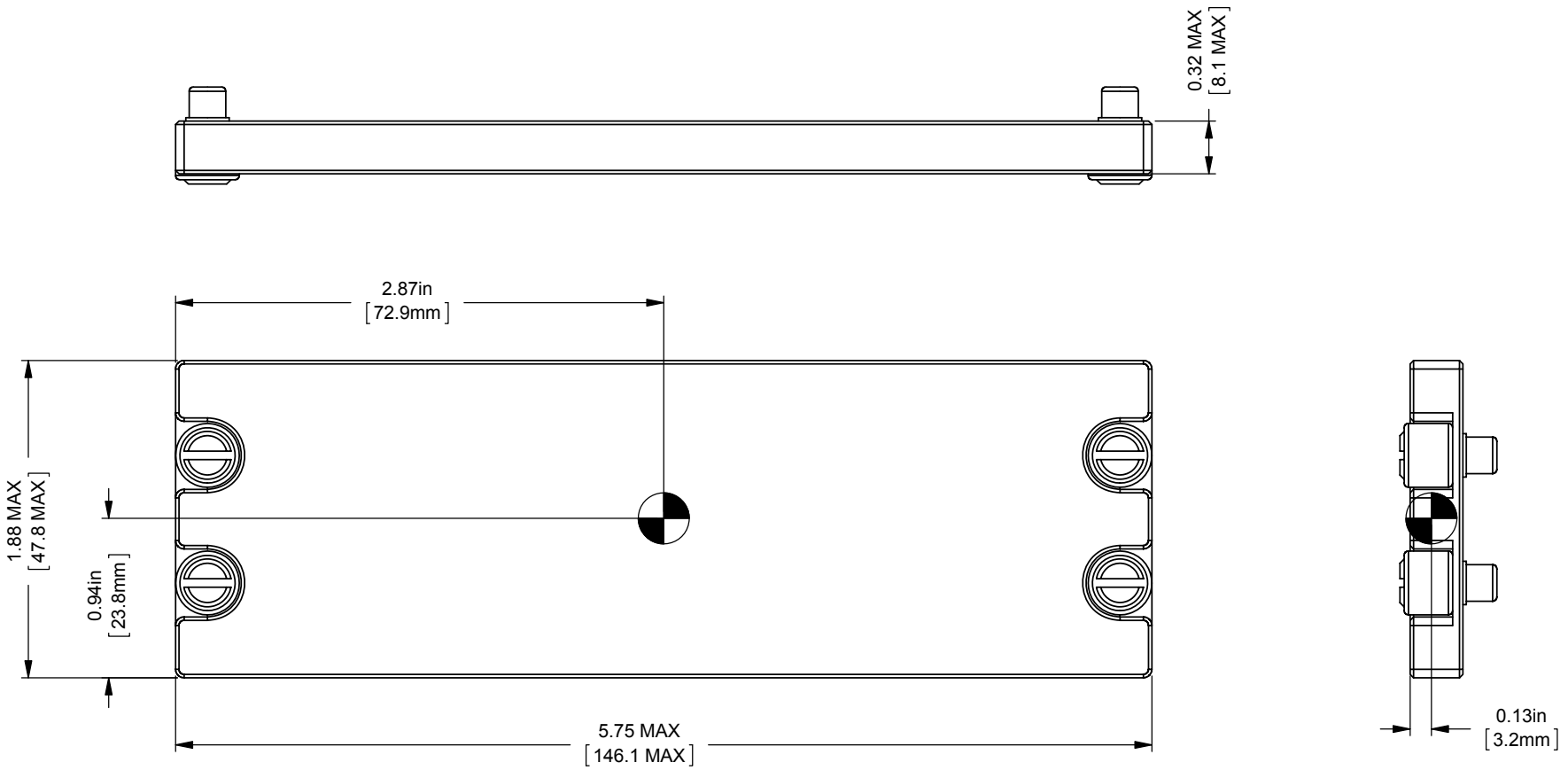
JUPITER AVIONICS CORPORATION

TITLE: 4 Dzus Blanking Plate

NCAGE CODE	PART NO.	SHEET
L00N3	JA71-004	1/1

DOC. NO.
JA71-004 Mechanical Installation Rev C.SLDDRW

JUPITER AVIONICS TEMPLATE SOLIDWORKS LANDSCAPE SIZEA REV B.DRWDOT



CENTER OF GRAVITY
±0.03in [0.8mm]

WEIGHT: 0.17 lbs [0.08 kg] MAX.

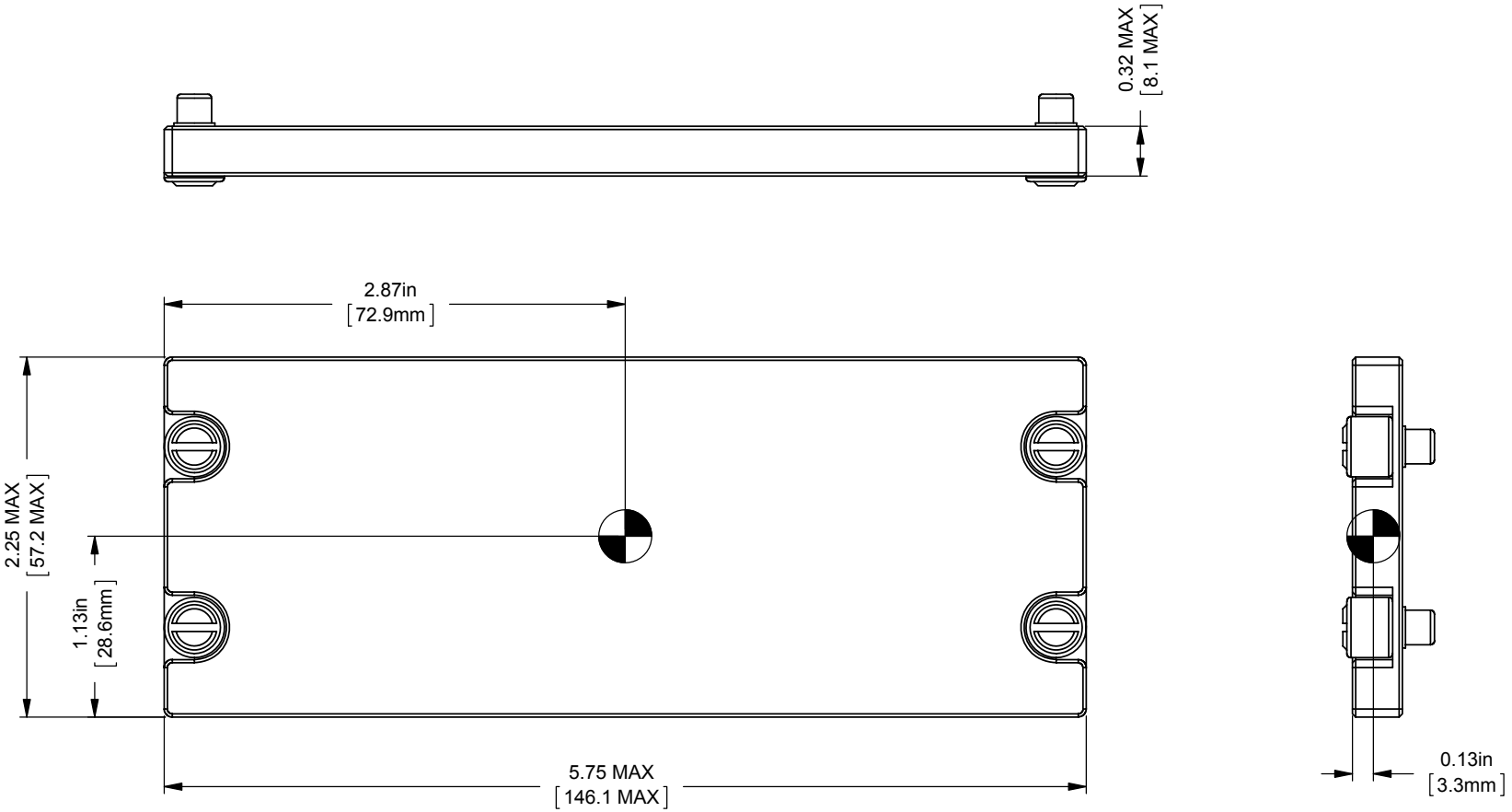
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ANGLES ARE IN DEGREES TOLERANCES: 1 DEC PLACE: ± 0.1 2 DEC PLACE: ± 0.01 3 DEC PLACE: ± 0.005 ANGLES: ± 0.5 DEG	PREPARED	TAT
	CHECKED	JAC 01-24-13 DS
	APPROVED	JAC 01-24-13 KDV
MATERIAL: N/A	CONFIDENTIAL & PROPRIETARY TO JUPITER AVIONICS CORP.	
FINISH: N/A	DRAWING NOT TO SCALE	

JUPITER AVIONICS CORPORATION

TITLE: 5 Dzus Blanking Plate

NCAGE CODE	PART NO.	SHEET
L00N3	JA71-005	1/1

DOC. NO.
JA71-005 Mechanical Installation Rev C.SLDDRW



CENTER OF GRAVITY
±0.03in [0.8mm]

WEIGHT: 0.19 lbs [0.09kg] MAX.

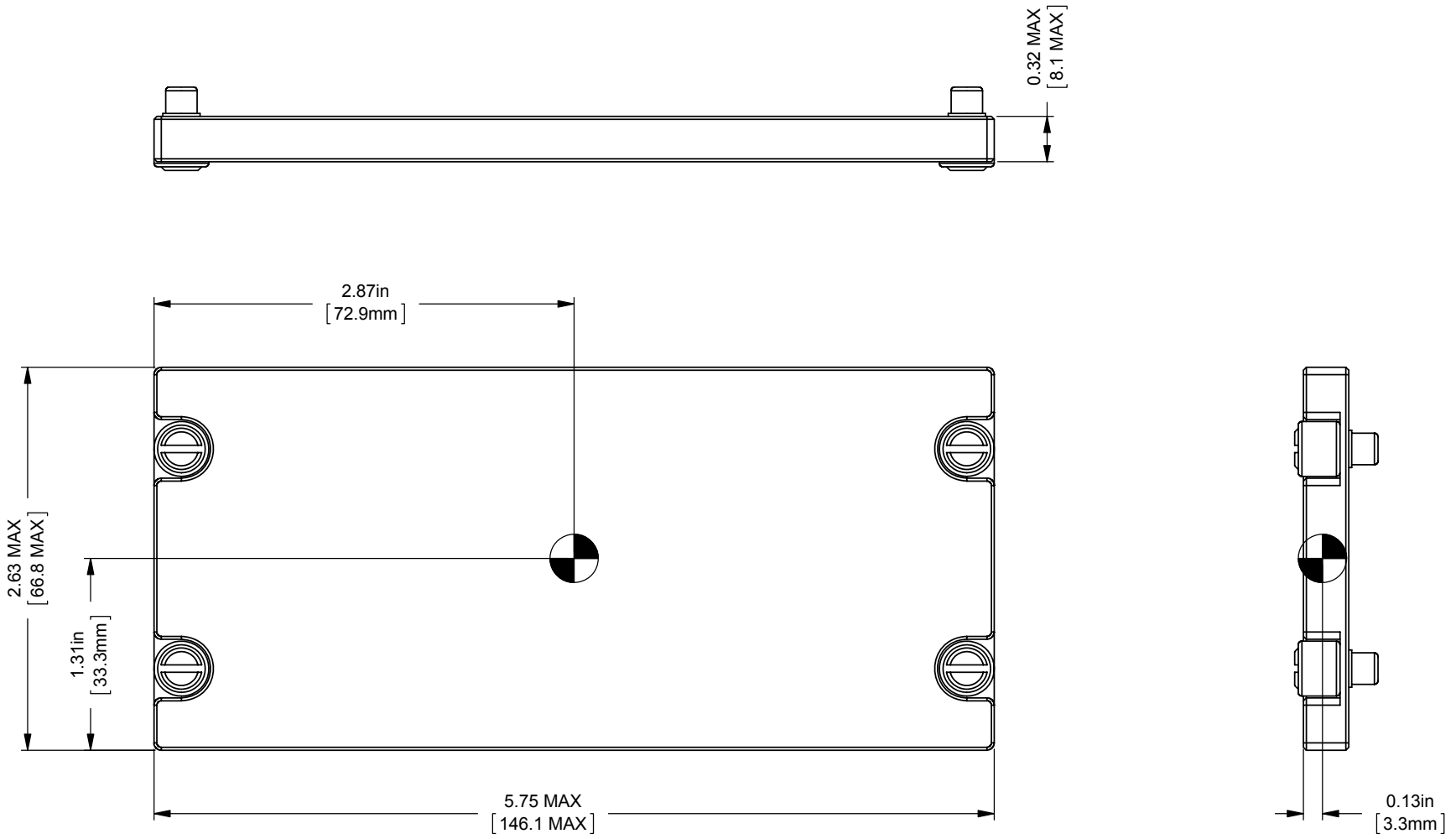
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ANGLES ARE IN DEGREES TOLERANCES: 1 DEC PLACE: ± 0.1 2 DEC PLACE: ± 0.01 3 DEC PLACE: ± 0.005 ANGLES: ± 0.5 DEG	PREPARED	TAT
	CHECKED	JAC 01-24-13 DS
	APPROVED	JAC 01-24-13 KDV
MATERIAL: N/A	CONFIDENTIAL & PROPRIETARY TO JUPITER AVIONICS CORP.	
FINISH: N/A	DRAWING NOT TO SCALE	

JUPITER AVIONICS CORPORATION

TITLE: 6 Dzus Blanking Plate

NCAGE CODE	PART NO.	SHEET
L00N3	JA71-006	1/1

DOC. NO.
JA71-006 Mechanical Installation Rev C.SLDDRW



CENTER OF GRAVITY
±0.03in [0.8mm]

WEIGHT: 0.21 lbs [0.1kg] MAX.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ANGLES ARE IN DEGREES TOLERANCES: 1 DEC PLACE: ± 0.1 2 DEC PLACE: ± 0.01 3 DEC PLACE: ± 0.005 ANGLES: ± 0.5 DEG	PREPARED	TAT
	CHECKED	JAC 01-24-13 DS
	APPROVED	JAC 01-24-13 KDV
MATERIAL: N/A	CONFIDENTIAL & PROPRIETARY TO JUPITER AVIONICS CORP.	
FINISH: N/A	DRAWING NOT TO SCALE	

JUPITER AVIONICS CORPORATION

TITLE: 7 Dzus Blanking Plate

NCAGE CODE	PART NO.	SHEET
L00N3	JA71-007	1/1

DOC. NO.
JA71-007 Mechanical Installation Rev C.SLDDRW

JUPITER AVIONICS TEMPLATE SOLIDWORKS LANDSCAPE SIZEA REV B.DRWDOT

Prepared:	Checked:	Approved:
KDV	JAC 02-20-13 SRM	JAC 02-20-13 KDV

Nomenclature	Dzus Blanking Plate		
Type/Model/ Part No.:	JA71-001, JA71-002, JA71-003, JA71-004, JA71-005, JA71-006 and JA71-007		
TSO No.:	N/A		
Manufacturer's Build Configuration:	*JA71-001 Build Configuration Rev B* *JA71-002 Build Configuration Rev B* *JA71-003 Build Configuration Rev B* *JA71-004 Build Configuration Rev B* *JA71-005 Build Configuration Rev B* *JA71-006 Build Configuration Rev B* *JA71-007 Build Configuration Rev B*		
Manufacturer's Test Report:	*JA71-XXX Test Report (Qualification - Final) Rev A*		
Manufacturer's Specification and/or Other Applicable Specification:	*JA71-XXX Design Specification Rev A*		
Manufacturer:	Jupiter Avionics Corporation		
Address:	1959 Kirschner Road, Kelowna, BC, Canada, V1Y 4N7		
Revision & Change No of DO-160:	Rev. G dated December 8, 2010	**Dates Tested:**	Jan 28 to Feb 13, 2013

CONDITIONS	**SECTION**	**DESCRIPTION OF TESTS CONDUCTED[1]**
Temperature and Altitude	4.0	Equipment identified as Category X, no test performed
Temperature Variation	5.0	Equipment identified as Category X, no test performed
Humidity	6.0	Equipment identified as Category X, no test performed
Operational Shock and Crash Safety Operational Shock[2] Crash Safety (impulse) Crash Safety (sustained)	7.0	 Equipment meets Category B (6 g for 11 msec) Equipment tested to Category B (20 g for 11 msec) Equipment tested to Category B (20 g for 3 sec)
Vibration[3] Fixed Wing – Random and Sine Helicopter – Random, unknown	8.0	 Equipment tested to Category [SBM] Equipment tested to Category [U2FF1]
Explosive Atmosphere	9.0	Equipment identified as Category X, no test performed
Waterproofness	10.0	Equipment identified as Category X, no test performed
Fluids Susceptibility	11.0	Equipment identified as Category X, no test performed
Sand and Dust	12.0	Equipment identified as Category X, no test performed
Fungus	13.0	Equipment identified as Category X, no test performed
Salt Fog Test	14.0	Equipment identified as Category X, no test performed
Magnetic Effect	15.0	Equipment identified as Category X, no test performed

CONFIDENTIAL AND PROPRIETARY TO JUPITER AVIONICS CORPORATION.

CONDITIONS	SECTION	DESCRIPTION OF TESTS CONDUCTED[1]
Power Input	16.0	Equipment identified as Category X, no test performed
Voltage Spike	17.0	Equipment identified as Category X, no test performed
Audio Frequency Susceptibility	18.0	Equipment identified as Category X, no test performed
Induced Signal Susceptibility	19.0	Equipment identified as Category X, no test performed
Radio Frequency Susceptibility (Radiated and Conducted)	20.0	Equipment identified as Category X, no test performed
Radio Frequency Emission	21.0	Equipment identified as Category X, no test performed
Lightning Induced Transient Susceptibility	22.0	Equipment identified as Category X, no test performed
Lightning Direct Effects	23.0	Equipment identified as Category X, no test performed
Icing	24.0	Equipment identified as Category X, no test performed
Electrostatic Discharge	25.0	Equipment identified as Category X, no test performed
Fire, Flammability	26.0	Equipment identified as Category X, no test performed
Other Tests	N/A	N/A

Remarks:

1 Test information can be found in Jupiter Avionics document *JA71-XXX Test Report (Qualification - Final) Rev A*

2. Operational shock performance qualified by similarity to performance after crash safety (impulse) test.

3. After exposure to vibration test conditions all critical resonances changed frequency less than 1.5%.

CONFIDENTIAL AND PROPRIETARY TO JUPITER AVIONICS CORPORATION.