Lightweight ARINC Trays

CARLISLE®
INTERCONNECT TECHNOLOGIES

20% LIGHTER!

ARINC 600 Lightweight Tray

INTRODUCTION

Carlisle Interconnect Technologies (CarlisleIT) has developed an innovative line of lightweight ARINC trays that are 20% lighter than standard trays. All of our trays are designed and fabricated using top quality aerospace grade materials that meet or exceed ARINC specifications, as well as all civil and military aircraft application criteria. Our special lightweight designs stand up to the most rigorous environmental hazards for in-flight and on-the-ground operations. Each tray is fully warrantied, ensuring that your avionics systems equipment will fit securely and operate safely. Our trays are engineered so customers can select the right product from off-the-shelf designs or customize a solution that will best fit their requirements. CarlisleIT trays are designed to accommodate positive pressure air cooling systems when installed on a plenum shelf or equipment rack.

FEATURES

» Over 20% lighter than standard ARINC 600 trays
» Tested to the following RTCA-DO-160G criteria:
   - Robust Random Vibration: Cat R, Curve B3, B4
   - High Level Short Duration Vibration: Cat H, Curve R
   - Operational Shock: Terminal sawtooth, 6G
   - Crash Safety Impulse: 20G terminal sawtooth
» RoHS compliant
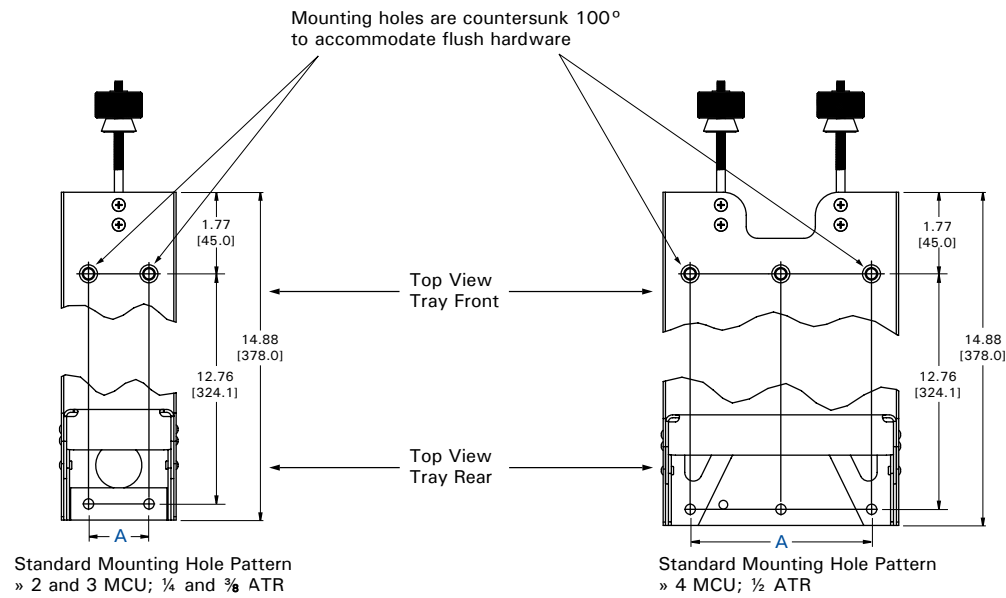» Materials meet flammability, optical smoke density and toxic gas generation requirements.

APPLICATIONS

» Lightweight Trays are direct fit replacements for most ARINC trays.
» It can be specified individually or as part of a CarlisleIT integrated assembly.
» Lightweight Trays are ideal for weight critical applications.

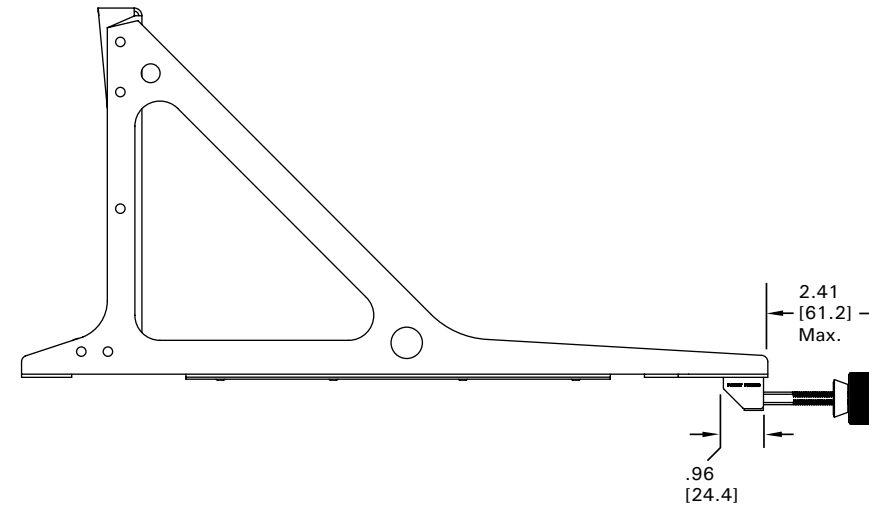ITAR FREE

Lightweight ARINC Trays

MOUNTING PATTERNS

The following cut away diagrams illustrate standard Front and Rear Mounting Hole placement for ARINC Trays.
No. 10 mounting holes are standard on all trays.
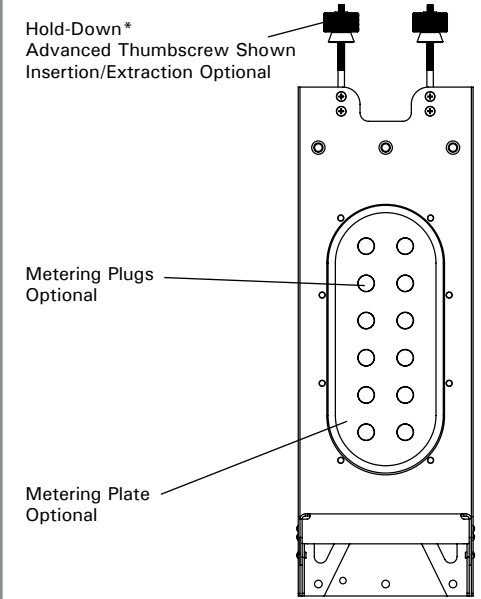Note: Dimensions are in inches, bracketed [numbers] represent millimeters.

Mounting holes are countersunk 100°
to accommodate flush hardware

1.77
[45.0]

14.88
[378.0]

12.76
[324.1]

Top View
Tray Front

Top View
Tray Rear

A

Standard Mounting Hole Pattern
» 2 and 3 MCU; ¼ and ⅜ ATR

1.77
[45.0]

14.88
[378.0]

12.76
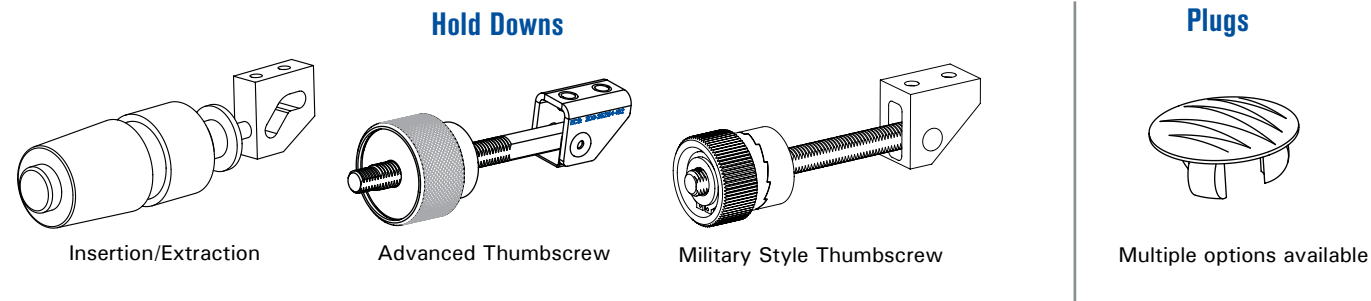[324.1]

A

Standard Mounting Hole Pattern
» 4 MCU; ½ ATR

MOUNTING DIMENSIONS: REFERENCE CHART

Need a lightweight tray in a larger size? Contact the factory for availability and lead time on large size lightweight trays.

ATR Size	A
¼	1.312 [33.3]
⅜	2.624 [66.6]
½	3.936 [100.0]

MCU Size	A
2 MCU	1.312 [33.3]
3 MCU	2.624 [66.6]
4 MCU	3.936 [100.0]

OPTIONS & ACCESSORIES

Contact facility for full listing of options.

Hold Downs

Insertion/Extraction   Advanced Thumbscrew   Military Style Thumbscrew

Plugs

Multiple options available

DIMENSIONAL DATA

Typical Side View

Typical Top View

Hold-Down*
Advanced Thumbscrew Shown
Insertion/Extraction Optional

Metering Plugs
Optional

Metering Plate
Optional

2.41
[61.2]
Max.

.96
[24.4]

ATR Size	A (Outside Dimensions Including Rivet Heads)	B
¼	2.57 [65.3]	~4.49
⅜	3.87 [98.3]	
½	5.19 [131.8]	

MCU Size	A (Outside Dimensions Including Rivet Heads)	B
2 MCU	2.57 [65.3]	7.37 [187.2]
3 MCU	3.87 [98.3]	
4 MCU	5.19 [131.8]	

Connector Plate and Connector Cutout

Metering Plugs Optional

Gasket

Hold-Down*
Advanced Thumbscrew Shown
Insertion/Extraction Optional

B

14.88
[378.0]

A

Metering Plate Optional
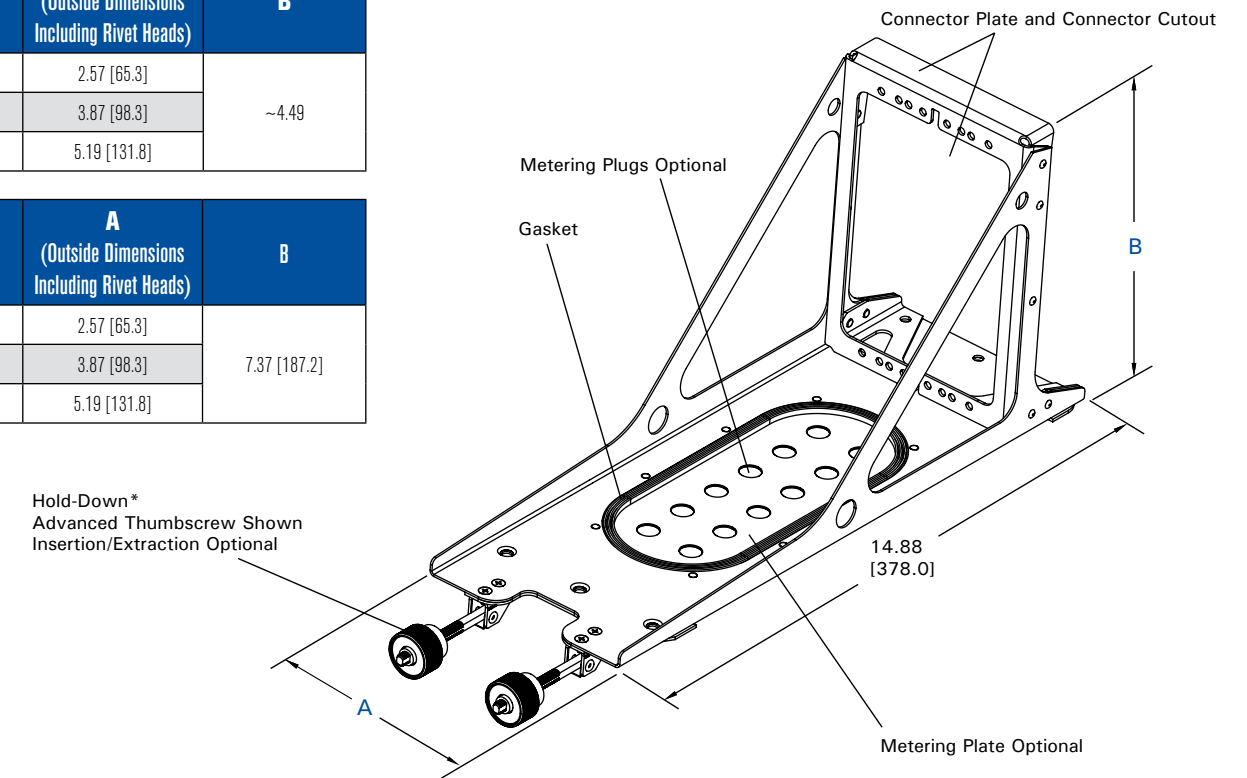
*Hold-Down options include: Insertion/Extraction, Advanced Thumbscrew and Military Style Thumbscrew.

All dimensions shown represent CarlisleIT's Standard tray dimensions and frequently requested options. CarlisleIT can customize any of these features to suit your specific needs.

CONNECTOR PLATE DIMENSIONS

For additional size information, special connector plate requirements or dual connector plate designs, please contact the factory. Note: Dimensions are in inches, bracketed [numbers] represent millimeters.

ATR Dimensions	
ATR	**A**
¼	2.390 [60.7]
⅜	3.690 [93.7]
½	5.010 [127.3]
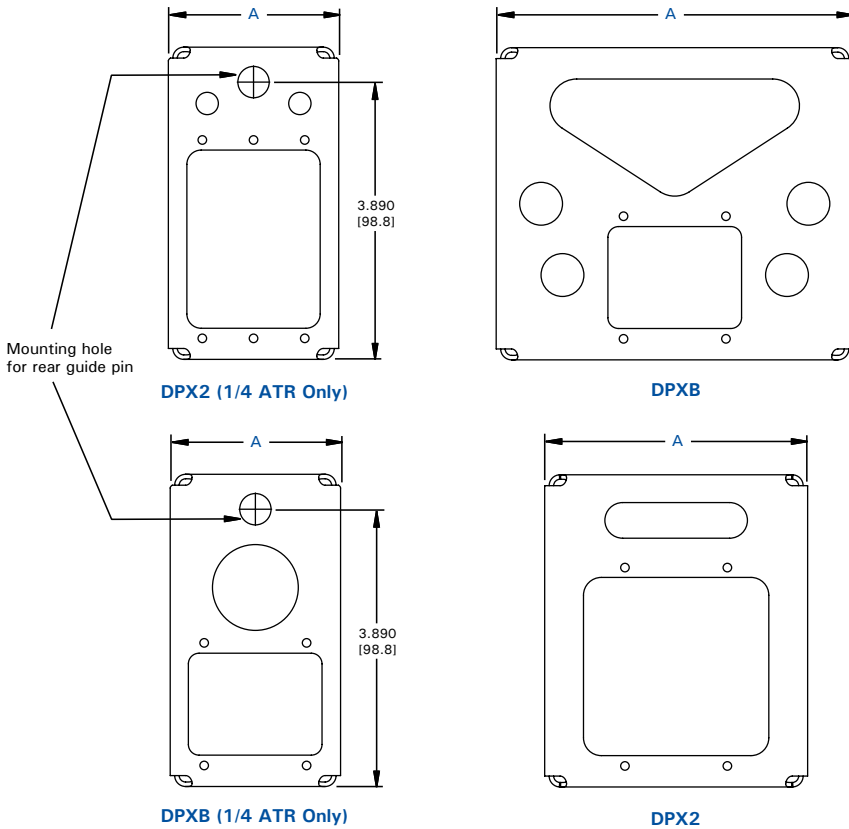
MCU Dimensions		
MCU	**A**	**Connector Sizes Supported**
2 MCU	2.39 [60.7]	1, 2
3 MCU	3.69 [93.7]	1, 2
4 MCU	5.01 [127.3]	1, 2, 3

Mounting hole for rear guide pin

3.890 [98.8]

DPX2 (1/4 ATR Only)

DPXB

3.890 [98.8]

DPXB (1/4 ATR Only)

DPX2

2 MCU

3 MCU

4 MCU

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