



# A31

1U Active Air Cooler

**PRODUCT SPECIFICATIONS**

## Table of Contents

1. PRODUCT DESCRIPTION .....	2
2. THERMAL PERFORMANCE CURVE.....	4
3. DM DRAWING .....	5
4. EP DRAWING .....	6
5. RoHS CERTIFICATE .....	7

## Model Number: A31

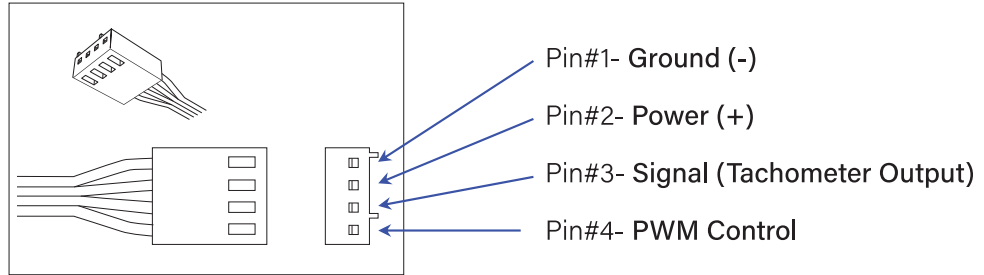
- AMD® Ryzen Threadripper Processor, Socket sWRX8, sTRX4, TR4, and AMD® Epyc Processor Socket SP3
- Active Cooler for 1U Server

## Overall Specification

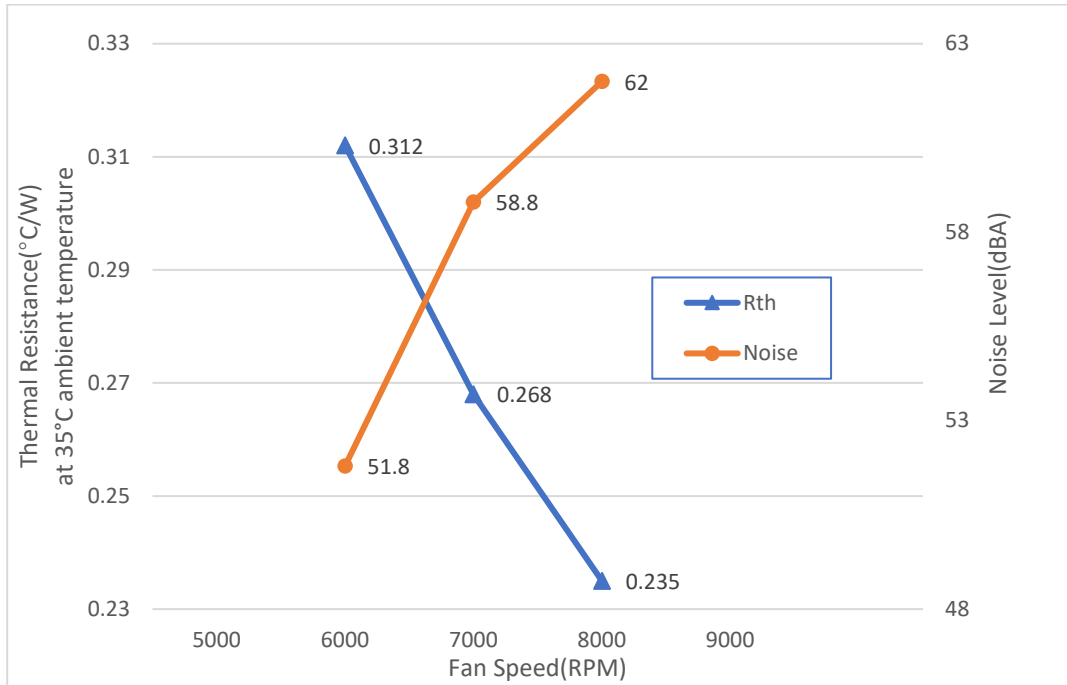
Dimension	120 x 82 x 27.5 mm
Weight	480 g
Material	Copper1100 Heatsink with Vapor Chamber Base
Fan	8038 Axial PWM Fan for Heat Exhausting
Mounting Method	Convenient Heat Sink Screw Captive Mounting Heatsink Screw Location Switchable between Different Mounting Spans
Thermal Grease	Shin-Etsu 7762 pre-printed
TDP	Support CPU Power up to 225 Watts Heat Dissipation

## Fan Specification

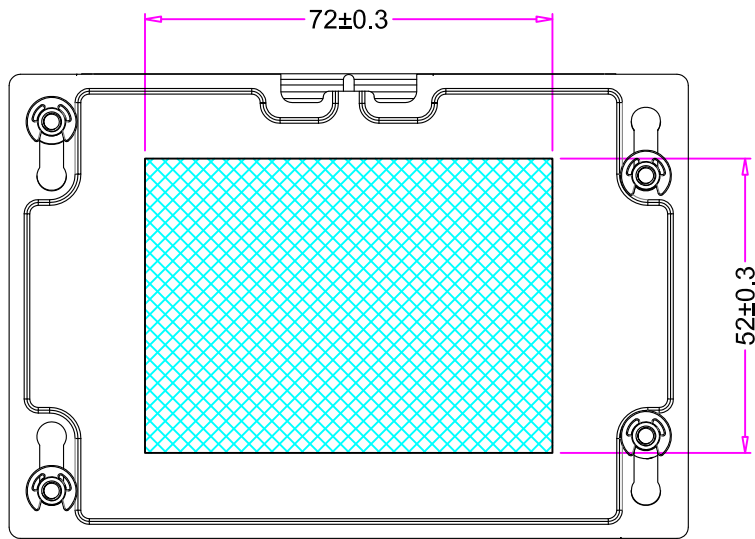
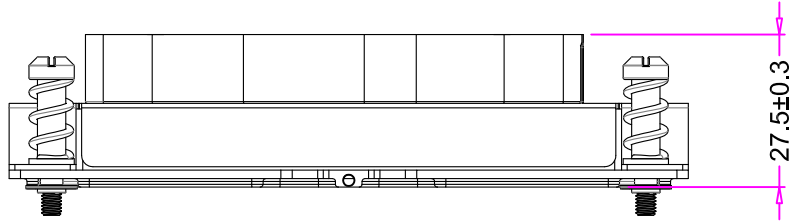
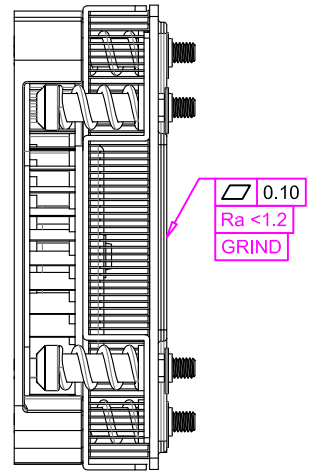
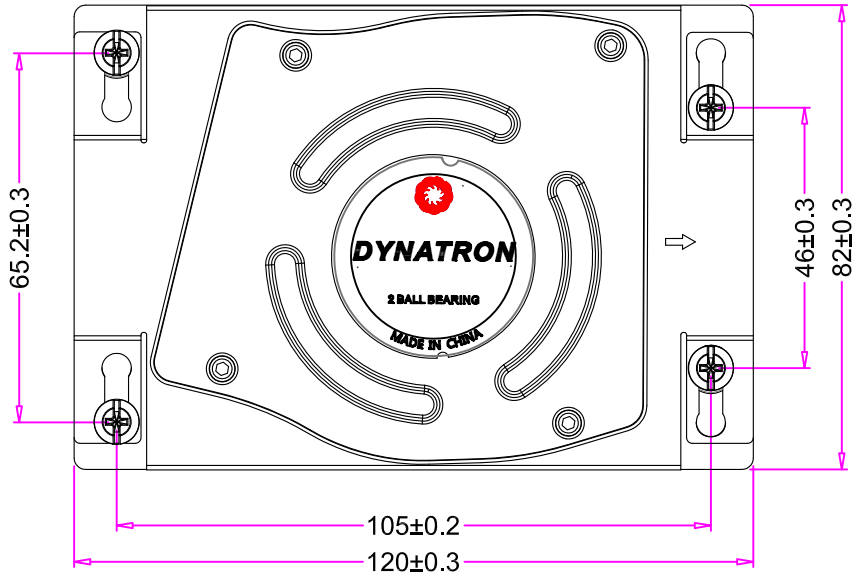
Model Number	DB128013BU-PWMG
Dimension	Ø80 x 13 mm
Bearing	Double Ball
Rated Voltage	12V
Rated Speed	At Duty Cycle 0~20%: 1500 ± 200 RPM At Duty Cycle 50%: 4000 ± 10% RPM At Duty Cycle 100%: 8000 ± 10% RPM
Input Power	At Duty Cycle 0~20%: 1.44 W At Duty Cycle 50%: 4.80 W At Duty Cycle 100%: 19.2 W
Maximum Airflow	At Duty Cycle 0~20%: 4.30 CFM At Duty Cycle 50%: 11.6 CFM At Duty Cycle 100%: 22.80 CFM
Rated Static Pressure	At Duty Cycle 0~20%: 3.0 mm-H2O At Duty Cycle 50%: 21.0 mm-H2O At Duty Cycle 100%: 83.8 mm-H2O
Acoustical Noise	At Duty Cycle 0~20%: 25.6 dBA At Duty Cycle 50%: 46.9 dBA At Duty Cycle 100%: 62.0 dBA
Lead Wire Pin Out	Pin#1- Black(-) Pin#2- Yellow(+) Pin#3- Green(Tachometer/ Signal Output) Pin#4- Blue (PWM)

**A31 | Socket sTRX4/TR4/ SP3****Lead Wire Pin Out Diagram :**

## Performance Chart: Active Cooler A31 Thermal Resistance Cooling Performance vs. Airflow



REV#	DESCRIPTION	CHECKER	DATE
0.0	INITIAL RELEASE	LANG	10/10/17



	NAME	DATE
DRAWN BY	ENGR	10/10/2017
CHECKED BY	LANG	10/10/2017
ENG. APPROVED		
MFG. APPROVED	-	-



DYNATRON CORPORATION

TOP MOTOR

TITLE: 1U Active Cooler **A31**  
Overall Dimension Drawing

**CONFIDENTIAL DOCUMENT**

THIS DRAWING CONTAINS INFORMATION PROPRIETARY TO DYNATRON CORPORATION AND DYNAEON INDUSTRIAL CO., LTD. ANY REPRODUCTION, DISCLOSURE, OR USE OF THIS DRAWING IS EXPRESSLY PROHIBITED EXCEPT AS DYNATRON CORPORATION AND DYNAEON INDUSTRIAL CO., LTD. MAY OTHERWISE AGREE TO IN WRITING.

VIEW	
UNITS	MM

DWG. No:

DYN-DM-A31

REV. 0.0

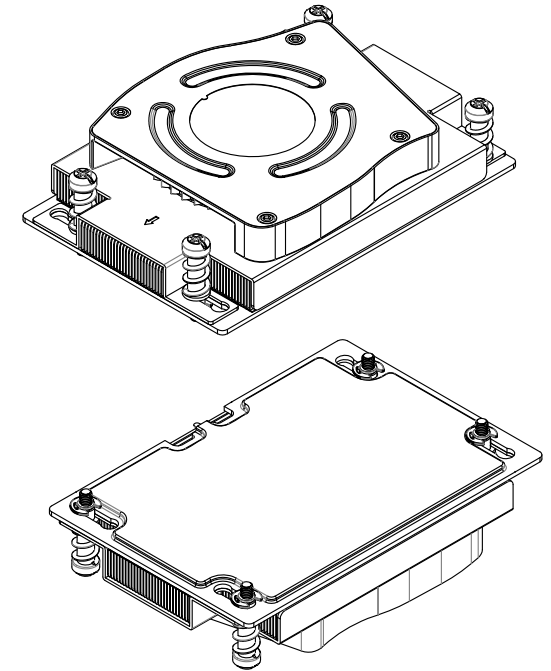
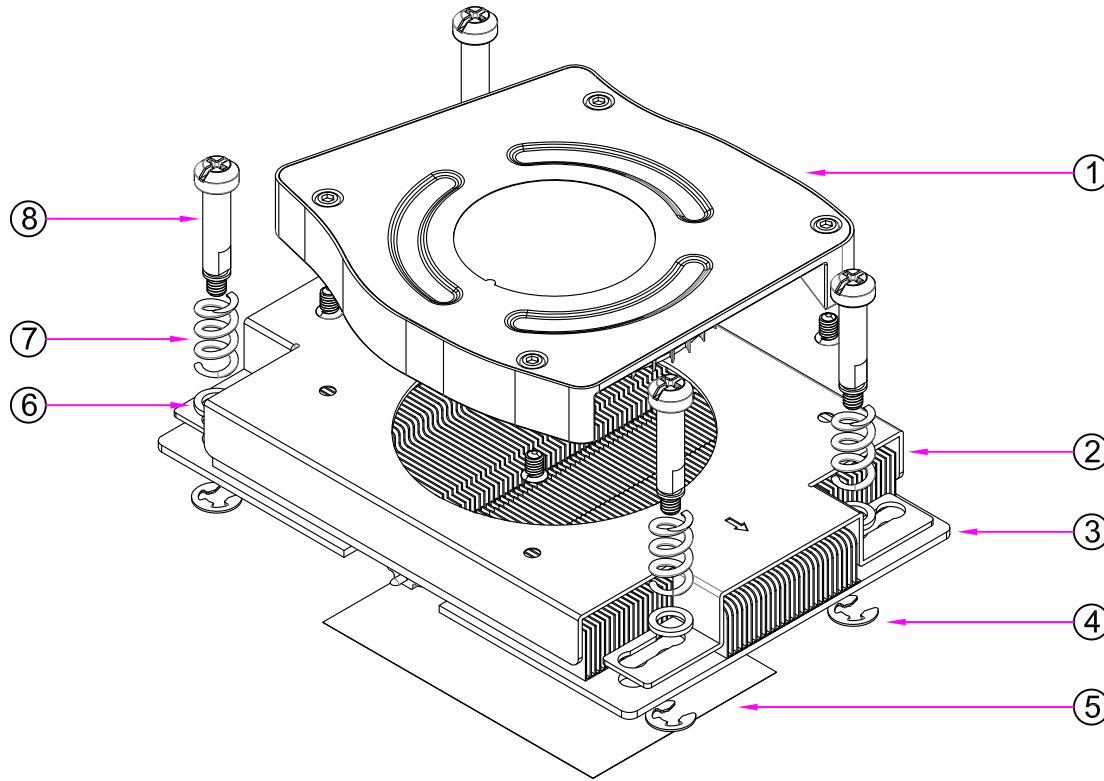
**CONFIDENTIAL DOCUMENT**

THIS DRAWING CONTAINS INFORMATION PROPRIETARY TO DYNATRON CORPORATION AND DYNAEON INDUSTRIAL CO., LTD. ANY REPRODUCTION, DISCLOSURE, OR USE OF THIS DRAWING IS EXPRESSLY PROHIBITED EXCEPT AS DYNATRON CORPORATION AND DYNAEON INDUSTRIAL CO., LTD. MAY OTHERWISE AGREE TO IN WRITING.

REV#	DESCRIPTION	CHECKER	DATE
0.0	INITIAL RELEASE	LANG	09/27/2017

ASSEMBLY PARTS


WHOLE SET OF HEATSINK



9	SCREW, BLOWER MOUNTING	STEEL	4
8	SCREW, COOLER MOUNTING ( 4380 )	STEEL	4
7	SPRING ( 0850 )	SWP	4
6	WASHER	STEEL	4
5	THERMAL GREASE, PRE-PRINTED	SHIN-ETSU 7762	1
4	C-CLIP	STEEL	4
3	HEATSINK VAPOR CHAMBER WITH STACKED FIN	COPPER1100 VC BASE COPPER1100 FIN	1
2	BLOWER COVER	ALUMINUM	1
1	BLOWER, DB128013BU-PWM, 8000 RPM	ALUMINUM FRAME	1
ITEM#	DESCRIPTION	MATERIAL	QTY.

**NOTES:**

1. THE FIGURE IS FOR REFERENCE ONLY, AND NOT FOR SCALE
2. OVERALL DIMENSION : 120 x 82 x 27.5 mm
3. OVERALL WEIGHT : 480 g

DATE	NAME	 DYNATRON CORPORATION	
DRAWN 10/10/2017	Engr	TITLE: 1U Active Cooler <b>A31</b> BOM & Exploded Assembly Drawing	
CHECKED 10/10/2017	LANG		
ENG. APPR.			
MFG. APPR.			
O.A.			
COMMENTS:		DWG. No:	REV
		DYN-EP-A31	0.0



## Certificate of Environment Protection 環保證明書

Document Number: RH\_A31-R0

<b>Customer:</b> 客戶名稱:	<b>Company:</b> _____ <b>Address:</b> _____ <b>Phone Number:</b> ____ - ____ - _____
<b>Issue Date:</b>	10/10/2017
<b>Product Model Number:</b>	A31
<p><b>Dynatron Corporation</b> hereby declares and certifies that all components manufactured are RoHS compliant according to the definitions and restrictions given by the European Union's Restriction (Directive 2002/95/EC) (Decision2011/65/EU)RoHS 2, on the restriction of the use of certain Hazardous Substances in the electrical and electronic equipment. Also, compliance to the most recent list of substances on the REACH candidate list.</p> <p><b>Number of substances on the Candidate List: 168 (last updated: 17/12/2015)</b></p> <p>No exemptions are claimed in order for the part to be compliant with the RoHS directive.</p> <p><b>Dynatron Corporation / 政久興業股份有限公司</b>證明所有產品,零件 (包括附屬品, 包裝類) 之環境管理物質完全符合 <b>RoHS, WEEE,</b> 及該環保標準之規定, 並承諾遵循以上之證明.</p> <div style="text-align: right; margin-top: 20px;"> <p><b>Dynatron Corporation.</b>            33200 Western Ave,            Union City, CA 94587            www.Dynatron-corp.com</p> </div> <p style="margin-top: 20px;"> <b>Title (職務):</b> _____ ASSISTANT-MANAGER _____         </p> <p style="margin-top: 10px;"> <b>Signature (簽字):</b> _____ <i>Alan Lee</i> _____         </p> <p style="text-align: right; margin-top: 10px;">           Date: 10 / 10 / 2017         </p>	