

DAS Series



- Low Profile
- Industry Standard Footprint
- Wide Operating Temperature
- Parallel Operation
- Remote On/Off
- Adjustable Output Voltage
- Overvoltage & Overcurrent Protection

Specification

Input

Input Voltage Range	• 36-72 VDC, 88-370 VDC (See table)
Input Current	• See table
Input Reverse Voltage Protection	• Not provided

Output

Output Voltage	• See table
Output Voltage Trim	• $\pm 10\%$ adjustable by external resistor
Minimum Load	• No minimum load required
Line Regulation	• See table
Load Regulation	• See table
Setpoint Accuracy	• $\pm 5\%$
Start-up Time	• 200 ms (nom. Vin max load)
Ripple & Noise	• See table
Overvoltage Protection	• 115-140% of rating, recycle input to reset
Overcurrent Protection	• >105% of rating, constant current with auto recovery
Short Circuit Protection	• Provided
Overtemperature Protection	• Baseplate temperature max. 85°C
Remote On/Off	• On = Logic LOW or short circuit, Off = Logic HIGH or open circuit
Remote Sense	• Standard on all models
Current Share	• 50 W model : Passive, redundant operation only • 100 W model : Active current share derate max current by 10% of the total output power

General

Efficiency	• See table
Isolation	• 88 - 370 VDC Input Models 3000 VAC Input to Output 2000 VAC Input to Baseplate, 500 VDC Output to Baseplate 36 - 72 VDC Input Models 500 VAC Input to Output 500 VAC Input to Baseplate 500 VDC Output to Baseplate
Isolation Resistance	• 50 MOhm
Switching Frequency	• 500 kHz typical
Power Density	• DAS50: 8.5 W/in ³ DAS100: 17 W/in ³
MTBF	• 345 kHrs per EIAJ RCR-9102

Environmental

Operating Temperature	• -10 °C to +85 °C (aluminium baseplate)
Case Temperature	• 85 °C max
Cooling	• Conduction-cooled
Operating Humidity	• 20-95% RH, non-condensing
Storage Temperature	• -40 °C to +85 °C (baseplate)
Storage Humidity	• 20-95% RH, non-condensing
Operating Altitude	• 3000 m
Shock	• 20 g 11ms once along each axis
Vibration	• 10-55 Hz, 5 g 3 minute period, 60 minutes along each axis

EMC & Safety

Emissions	• EN55022 level A conducted & radiated*
ESD Immunity	• EN61000-4-2, level 2 Perf Criteria A
Radiated Immunity	• EN61000-4-3, level 3 Perf Criteria A
EFT/Burst	• EN61000-4-4, level 3 Perf Criteria A
Safety Approvals	• EN60950-1, UL60950-1, CSA22.2 No. 60950-1

* Contact sales for application note.

Models and Ratings

Output Power	Input Voltage	Input Current	Output Voltage	Output Current	Regulation		Ripple & Noise (pk-pk max) ⁽¹⁾	Efficiency ⁽²⁾	Model Number
					Line	Load			
50 W	88-370 VDC	0.5 A	5 V	10.0 A	20 mV	40 mV	150 mV	82%	DAS50F05
	36-72 VDC	1.3 A	5 V	10.0 A	20 mV	40 mV	150 mV	80%	DAS504805
	88-370 VDC	0.5 A	12 V	4.2 A	48 mV	100 mV	200 mV	82%	DAS50F12
	36-72 VDC	1.3 A	12 V	4.2 A	48 mV	100 mV	200 mV	82%	DAS504812
	88-370 VDC	0.5 A	24 V	2.1 A	96 mV	150 mV	200 mV	82%	DAS50F24
100 W	88-370 VDC	1.0 A	5 V	20.0 A	20 mV	40 mV	150 mV	82%	DAS100F05
	36-72 VDC	2.6 A	5 V	20.0 A	20 mV	40 mV	150 mV	80%	DAS1004805
	88-370 VDC	1.0 A	12 V	8.5 A	48 mV	100 mV	200 mV	82%	DAS100F12
	36-72 VDC	2.6 A	12 V	8.5 A	48 mV	100 mV	200 mV	82%	DAS1004812
	88-370 VDC	1.0 A	24 V	4.2 A	96 mV	150 mV	200 mV	82%	DAS100F24

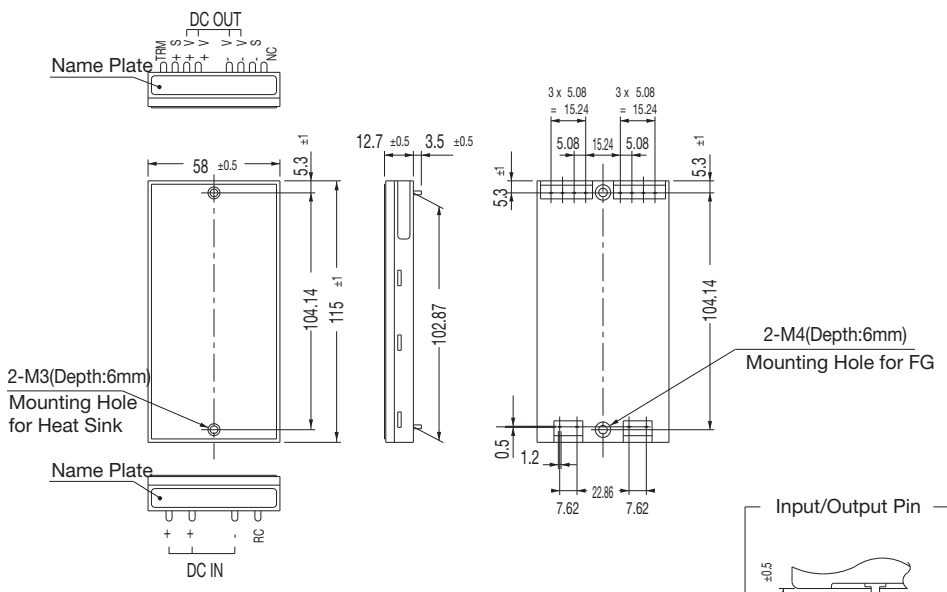
Notes

- 1. Ripple & noise measured at 20 MHz bandwidth.
- 2. At rated input and full load.

Mechanical Details

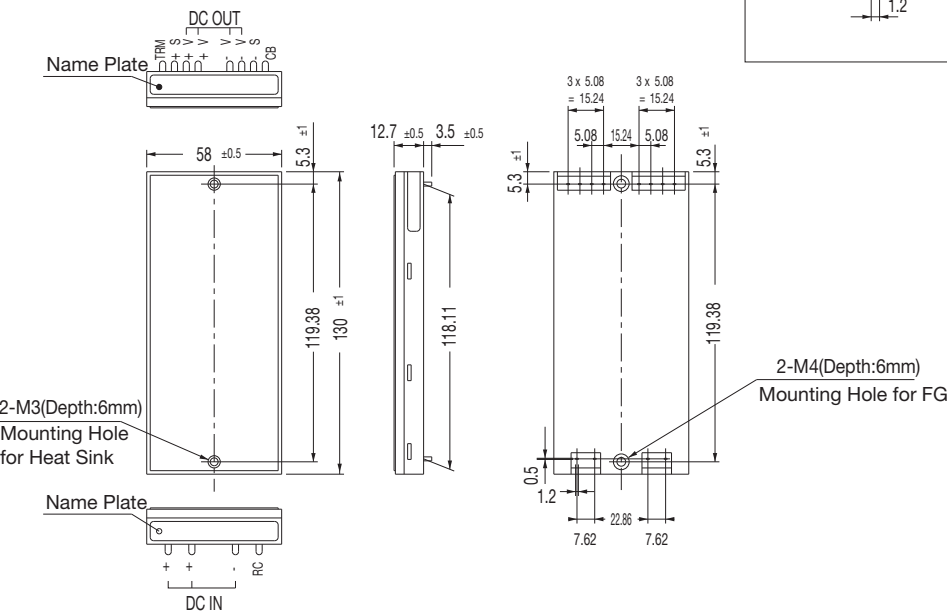
DAS50

Weight: <120 g



DAS100

Weight: <150g



Notes

- 1. All measurements are in mm. Tolerance: ±0.3 mm.
- 2. Mounting torque:
For heat sink: 0.4 Nm
For FG: 1.2 Nm