# **CONVECTION COOLED**

# RF POWER LOADS

## **Self Cooling with**

### **Conservative Power Ratings**

Bird manufactures a broad line of Convention-Cooled RF Loads. They are known for their high-quality, rugged construction and conservative power ratings. These loads are fully shielded against production of extraneous radiation and the self-cooling design needs no cooling plate.

#### **PRODUCT FEATURES**

- Self cooling design, needs no cooling plate
- Frequencies up to 18 GHz
- Load requires no AC power
- Rugged construction
- Broadband operation



### **Specifications**

#### **SYSTEM**

<b>Coolant Method</b>	Dry, convection-cooled	
Impedance	50 Ohm	
AC Power	None except 1500 W models require 115/230V AC power	
Operating Position	Any	

#### **ENVIRONMENTAL**

Ambient Temperature	-40 °C to 40 °C (-40 °F to 104 °F)		
Humidity	95% noncondensing		



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#### PART NUMBER DEFINITION

**Example: 2-T-FB=** 2 W, Convection-cooled load with Female BNC connectors.

Note: Not all combinations are valid. If assistance is needed consult the factory to define the model that is right for you.

#### LOAD CONFIGURATION GUIDE

Power Rating	Product Type	Connector Gender	Connectors*
See selection guide	T, WT = Convection-cooled CT = Conduction-cooled ST = Square convection-cooled	<b>F</b> = Female <b>M</b> = Male	<b>A</b> = SMA <b>B</b> = BNC <b>N</b> = N <b>T</b> = TNC <b>E</b> = IEC 7/16

#### **LOAD SELECTION GUIDE**

Model	Power Rating	Connectors	Frequency Range & VSWR	Dimensions	Weight	Finish
2-T	2 W	BNC, 7/16 DIN, N, TNC	DC to 1 GHz @ 1.10:1 max 1 to 4 GHz @ 1.25:1 max	2.9 in x 1.4 in dia (74 mm x 36 dia mm)	4.6 oz (131 g)	Tri-Alloy
2-NT	2 W	N	DC to 1 GHz @ 1.10:1 max 1 to 3 GHz @ 1.15:1 max	2.9 in x 1.4 in dia (74 mm x 36 dia mm)	4.6 oz (131 g)	Tri-Alloy
2-18T	2 W	SMA, N	DC to 12.4 GHz @ 1.20:1 max 12.4 to 18 GHz @ 1.25:1 max	1.0 in x 0.9 in dia (26 mm x 23 dia mm)	2.0 oz (57 g)	Stainless Steel
5-T	5 W	BNC, 7/16 DIN, N, TNC	DC to 1 GHz @ 1.10:1 max 1 to 4 GHz @ 1.25:1 max	2.9 in x 1.4 in dia (74 mm x 36 dia mm)	4.6 oz (131 g)	Tri-Alloy
5-NT	5 W	N	DC to 1 GHz @ 1.10:1 max 1 to 3 GHz @ 1.25:1 max	2.9 in x 1.4 in dia (74 mm x 36 dia mm)	4.6 oz (131 g)	Tri-Alloy
5-18T	5 W	SMA, N	DC to 4 GHz @ 1.15:1 max 4 to 12.4 GHz @ 1.25:1 max 12.4 to 18 GHz @ 1.35:1 max	1.4 in x 0.9 in dia (36 mm x 23 dia mm)	2.0 oz (57 g)	Stainless Steel
10-T	10 W	N	DC to 1 GHz @ 1.10:1 max 1 to 3 GHz @ 1.15:1 max	2.2 in x 2.3 in dia (56 mm x 59 dia mm)	5.9oz (168 g)	Black Anodized Aluminum
25-T	25 W	SMA, BNC, 7/16 DIN, N, TNC, 4.1/9.5	DC to 1 GHz @ 1.10:1 max 1 to 4 GHz @ 1.25:1 max	5.3 in x 2.3 in dia (135 mm x 59 dia mm)	7 oz (199 g)	Black Anodized Aluminum
25-NT	25 W	N	DC to 1 GHz @ 1.10:1 max 1 to 3 GHz @ 1.25:1 max	4.9 in x 2.3 in dia (125 mm x 59 dia mm)	7 oz (199 g)	Black Anodized Aluminum
25-6T	25 W	N	DC to 6 GHz @ 1.20:1 max	3.5 in x 2.3 in x 2.3 in (89 mm x 59 mm x 59 mm)	14.0 oz (397 g)	Black Anodized Aluminum
25-18T	50 W	N	DC to 6 GHz @ 1.20:1 max 6 to 12.4 GHz @ 1.30:1 max 12.4 to 18 GHz @ 1.40:1 max	3.5 in x 2.3 in x 2.3 in (89 mm x 59 mm x 59 mm)	14.0 oz (397 g)	Black Anodized Aluminum
50-T	50 W	SMA, BNC, 7/16 DIN, N, TNC, 4.1/9.5	DC to 1 GHz @ 1.10:1 max 1 to 4 GHz @ 1.25:1 max	5.3 in x 2.3 in dia (135 mm x 59 dia mm)	1.3 lb (590 g)	Black Anodized Aluminum
50-NT	50 W	N	DC to 1 GHz @ 1.10:1 max 1 to 3 GHz @ 1.15:1 max	5.3 in x 2.3 in dia (135 mm x 59 dia mm)	1.2 lb (545 g)	Black Anodized Aluminum
50-6T	50 W	N	DC to 1 GHz @1.20:1 max	4.0 in x 3.0 in x 3.0 in (102 mm x 77 mm x 77 mm)	1.6 lb (726 g)	Black Anodized Aluminum

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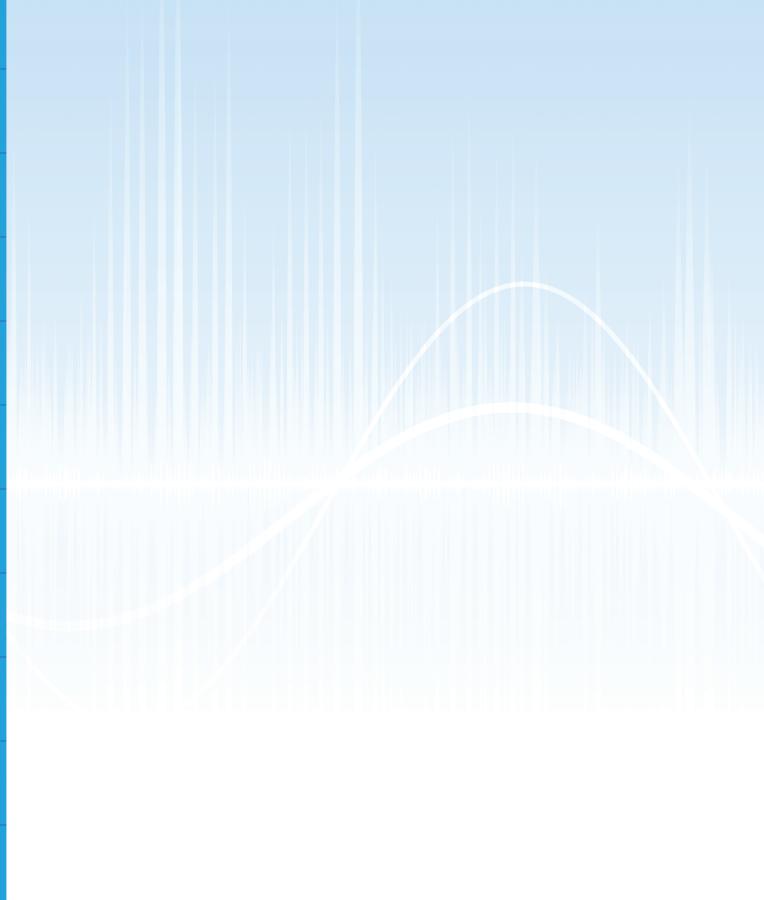
# **RF POWER LOADS**

### **LOAD SELECTION GUIDE**

Model	<b>Power Rating</b>	Connectors	Frequency Range & VSWR	Dimensions	Weight	Finish
50-18T	100 W	N	DC to 6 GHz @ 1.25:1 max 6 to 12.4 GHz @ 1.35:1 max 12.4 to 18 GHz @ 1.45:1 max	4.0 in x 3.0 in x 3.0 in (102 mm x 77 mm x 77 mm)	1.6 lb (726 g)	Black Anodized Aluminum
75-T	100 W	BNC, 7/16 DIN, N	DC to 1 GHz @ 1.10:1 max 1 to 3 GHz @ 1.20:1 max	7.2 in x 2.3 in dia (183 mm x 59 dia mm)	1.5 lb (682 g)	Black Anodized Aluminum
100-T	100 W	BNC, 7/16 DIN, N, TNC	DC to 1 GHz @ 1.10:1 max 1 to 3 GHz @ 1.25:1 max	6.8 in x 6.4 in x 2.6 in (173 mm x 163 mm x 67 mm)	3.6 lb (1.6 kg)	Black Anodized Aluminum
100-ST	100 W	BNC, 7/16 DIN, N, TNC	DC to 1 GHz @ 1.10:1 max 1 to 4 GHz @ 1.25:1 max	7.4 in x 2.8 in x 2.8 in (188 mm x 72 mm x 72 mm)	2.7 lb (1.2 kg)	Black Anodized Aluminum
100-NST	100 W	N	DC to 1 GHz @ 1.10:1 max 1 to 3 GHz @ 1.20:1 max	7.3 in x 2.8 in x 2.8 in (186 mm x 72 mm x 72 mm)	2.7 lb (1.2 kg)	Black Anodized Aluminum
100-6T	100 W	N	DC to 2 GHz @1.20:1 max 2 to 4 GHz @ 1.30:1 max 4 to 6 GHz @ 1.40:1 max	5.5 in x 3.5 in x 3.8 in (140 mm x 89 mm x 97 mm)	2.2 lbs (1.0 kg)	Black Anodized Aluminum
150-T	150 W	BNC, N	DC to 1 GHz @ 1.10:1 max 1 to 3.0 GHz @ 1.25:1 max	6.8 in x 11.5 in x 2.6 in (173 mm x 293 mm x 67 mm)	6.0 lb (2.8 kg)	Black Anodized Aluminum
150-ST	150 W	N	DC to 1 GHz @ 1.10:1 max 1 to 3.0 GHz @ 1.25:1 max	8.1 in x 4.0 in x 4.0 in (206 mm x 102 mm x 102 mm)	5.0 lb (2.3 kg)	Black Anodized Aluminum
150-WT	150 W	N	DC to 1 GHz @ 1.10:1 max 1 to 3.0 GHz @ 1.25:1 max	4.9 in x 5.4 in x 4.8 in (125 mm x 138 mm x 122 mm)	2.5 lb (1.2 kg)	Black Anodized Aluminum
300-T	300 W	N	DC to 1 GHz @ 1.10:1 max 1 to 3.0 GHz @ 1.25:1 max	7.4 in x 5.4 in x 10.9 in (188 mm x 138 x 277 mm)	11.5 lb (5.3 kg)	Black Anodized Aluminum
300-WT	300 W	7/16 DIN, N	DC to 1 GHz @ 1.10:1 max 1 to 3.0 GHz @ 1.25:1 max	8.2 in x 5.4 in x 4.8 in (209 mm x 138 x 122 mm)	4.7 lb (2.2 kg)	Black Anodized Aluminum
500-WT	500 W	7/16 DIN, N	DC to 1 GHz @ 1.10:1 max 1 to 3.0 GHz @ 1.25:1 max	11.0 in x 5.4 in x 4.8 in (280 mm x 138 mm x 122 mm)	7.8 lb (3.6 kg)	Black Anodized Aluminum
600-T	600 W	7/16 DIN, N	DC to 1 GHz @ 1.10:1 max 1 to 3.0 GHz @ 1.25:1 max	12.4 in x 9.6 in x 7.4 in (315 mm x 244 mm x 188 mm)	21.5 lb (9.8 kg)	Black Anodized Aluminum
1000-T	1 kW	N	DC to 1 GHz @ 1.10:1 max 1 to 3.0 GHz @ 1.25:1 max	12.3 in x 9.6 in x 12.8 in (313 mm x 244 mm x 326 mm)	26.5 lb (12.0 kg)	Black Anodized Aluminum
1000-WT	1 kW	7/16 DIN, N	DC to 1 GHz @ 1.10:1 max 1 to 3.0 GHz @ 1.25:1 max	18.5 in x 10.6 in x 4.8 in (470 mm x 270 mm x 122 mm)	26.5 lb (12.0 kg)	Black Anodized Aluminum
1500-WT**	1.5 kW	7/16 DIN, N	DC to 1 GHz @ 1.10:1 max 1 to 2.4 GHz @ 1.25:1 max	20 in x 10.6 in x 6.0 in (508 mm x 270 mm x 152 mm)	30.0 lb (13.6 kg)	Black Anodized Aluminum
1500-WA**	1.5 kW	N	DC to 1 GHz @ 1.10:1 max 1 to 2.4 GHz @ 1.25:1 max	20.4 in x 10.7 in x 5.9 in (519 mm x 272 mm x 150 mm)	30.0 lb (13.6 kg)	Black Anodized Aluminum

<sup>\*\*1.5</sup> kW Models require 115/230V AC Power





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