

Provided by:



**Advanced Test  
Equipment Corp.**

**www.atecorp.com  
(800) 404-ATEC**

*Rentals • Sales • Calibration • Service*



**CSZ**  
Cincinnati Sub-Zero

---

# Z-PLUS

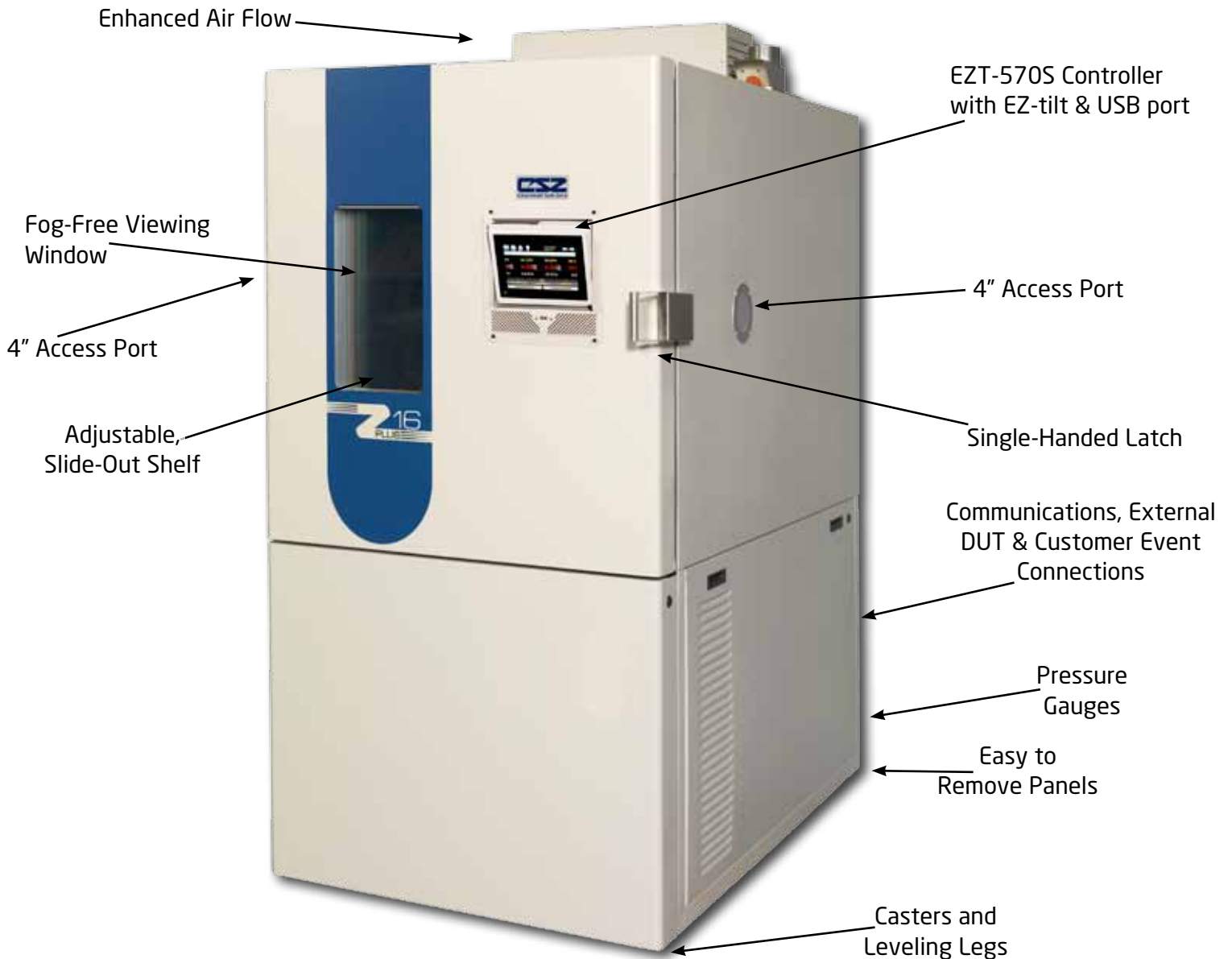
Temperature / Humidity Chambers



[www.cszproducts.com](http://www.cszproducts.com)

## Performance You Specify, Reliability You Expect, Features You Want, Value You Need

Designed for ease-of-use, reliability and performance, this line of chambers incorporates customer-requested features with extended performance for faster ramp rates. Whether you need to do basic temperature cycling or accelerated stress testing, the Z-Plus offers a variety of sizes, temperature ranges and performance packages that meet your testing needs.



# Z-Plus Performance Specifications

Tundra® -45°C to 190°C

Model	Cooling Performance with Empty chamber in Minutes from:				Cooling Rate <sup>2</sup> °C / min	Heating Performance with Empty Chamber in Minutes from:		
	24°C		85°C			24°C		-34°C
	-18°C	-34°C	-40°C	-40°C		93°C	190°C	24°C
ZP-8-2-SCT/AC	6	12	18	30	4.1	10	30	10
ZP-8-3.5-SCT/AC	4	8	12	22	5.6	3.5	12	3.5
ZP-8-6-SCT/WC	3	5	7	12	10.4	3.5	12	3.5
ZP-16-3.5-SCT/AC	5	10	15	25	5.0	10	30	6
ZP-16-6-SCT/WC	3	7	10	18	7.0	10	30	6
ZP-16-10-SCT/WC	2.5	5	7	12	10.4	4	11	3
ZP-32-3.5-SCT/AC	7	15	20	35	3.5	10	35	8
ZP-32-6-SCT/WC	4	9	12	22	5.6	10	35	8
ZP-32-10-SCT/WC	3	6	8	18	7.0	7	20	6
ZP-32-15-SCT/WC	2	4	6	11	11.3	6	16	5
ZP-44-3.5-SCT/AC	11	25	32	52	2.4	20	60	15
ZP-44-6-SCT/WC	5.5	15	20	30	4.1	20	60	15
ZP-44-10-SCT/WC	4	8	12	22	5.6	8	25	7
ZP-44-15-SCT/WC	3	7	10.5	14	9.0	6	15	5
ZP-64-3.5-SCT/AC	14	30	38	65	2.0	25	75	20
ZP-64-6-SCT/WC	7	17	22	38	3.2	25	75	20
ZP-64-10-SCT/WC	5	11	18	24	5.2	10	30	8
ZP-64-15-SCT/WC	4	9	14	18	7.0	8	20	6
ZPS-80-3.5-SCT/AC	16	36	48	75	1.7	30	80	40
ZPS-80-6-SCT/WC	12	24	30	50	2.5	30	80	40
ZPS-80-10-SCT/WC	7	14	25	32	3.9	15	40	12
ZPS-80-15-SCT/WC	5	12.5	19	24	5.2	12	31	10
ZP-96-3.5-SCT/AC	18	40	55	85	1.5	35	90	30
ZP-96-6-SCT/WC	14	25	35	55	2.3	35	90	30
ZP-96-10-SCT/WC	10	18	30	45	2.8	20	45	14
ZP-96-15-SCT/WC	7	15	25	40	3.1	12.5	31.5	10.5

Model	Live Load Capacity Watts			Electrical Power Requirements Full Load Amps <sup>1</sup>		
	-18°C	-34°C	-40°C	208/230V, 1Ph	208/230V, 3Ph	460V, 3Ph
ZP-8-2-SCT/AC	1800	950	725	31	27	-
ZP-8-3.5-SCT/AC	2110	1100	925	-	37	23
ZP-8-6-SCT/WC	2200	1500	1200	-	46	21
ZP-16-3.5-SCT/AC	3000	1700	1300	-	37	23
ZP-16-6-SCT/WC	3600	2300	1800	-	46	21
ZP-16-10-SCT/WC	4000	2500	2000	-	-	29
ZP-32-3.5-SCT/AC	3000	1700	1300	-	37	23
ZP-32-6-SCT/WC	3600	2300	1800	-	46	21
ZP-32-10-SCT/WC	6000	3500	2300	-	-	29
ZP-32-15-SCT/WC	8000	5000	3000	-	-	35
ZP-44-3.5-SCT/AC	2800	1500	1100	-	37	23
ZP-44-6-SCT/WC	3300	2000	1500	-	46	21
ZP-44-10-SCT/WC	6000	3500	2300	-	-	29
ZP-44-15-SCT/WC	8000	5000	3000	-	-	35
ZP-64-3.5-SCT/AC	2600	1300	800	-	37	23
ZP-64-6-SCT/WC	3100	1800	1300	-	46	21
ZP-64-10-SCT/WC	6000	3500	2300	-	-	29
ZP-64-15-SCT/WC	8000	5000	3000	-	-	35
ZPS-80-3.5-SCT/AC	2600	1300	800	-	37	23
ZPS-80-6-SCT/WC	3100	1800	1300	-	46	21
ZPS-80-10-SCT/WC	6000	3500	2300	-	-	29
ZPS-80-15-SCT/WC	8000	5000	3000	-	-	35
ZP-96-3.5-SCT/AC	2600	1300	800	-	37	23
ZP-96-6-SCT/WC	3100	1800	1300	-	46	21
ZP-96-10-SCT/WC	6000	3500	2300	-	-	29
ZP-96-15-SCT/WC	8000	5000	3000	-	-	35

Performance is based on 230V, 60 Hz. operation and a 24°C ambient. Lower voltages will extend heating performance. For 50 Hz performance, please refer to the 95000-I, Z-Plus international brochure. Specifications are subject to change.

<sup>1</sup> Electrical requirements based on temperature only units. Amperage may increase on humidity models. See schematic for actual values.

<sup>2</sup> From +85°C to -40°C

# Z-Plus Performance Specifications

## Cascade -70°C to 190°C

Model	Cooling Performance with Empty Chamber in Minutes from:						Cooling Rate <sup>2</sup> °C / min	Heating Performance with Empty Chamber in Minutes from:			
	24°C					85°C		24°C		-34°C	-68°C
	-18°C	-34°C	-40°C	-54°C	-68°C	-40°C		93°C	190°C	24°C	24°C
ZP-8-2-2-H/AC	5	8	9	12	20	18	7.0	10	30	10	15
ZP-8-3.5-3.5-SC/AC	3	5	6	10	16	14	9.0	3.5	12	3.5	5
ZP-16-2-2-H/AC	6	10	12	17	25	25	5.0	15	50	12	22
ZP-16-3.5-3.5-SC/AC	5	8	11	16	23	25	5.0	10	30	6	12
ZP-16-6-6-SC/WC	4	5	6	9	15	13	9.6	10	30	6	12
ZP-32-2-2-H/AC	10	16	20	28	38	40	3.1	20	72	15	25
ZP-32-3.5-3.5-SC/AC	8	13	16	23	33	30	4.2	10	35	8	15
ZP-32-6-6-SC/WC	5	8	10	15	23	20	6.3	10	35	8	15
ZP-44-3.5-3.5-SC/AC	13	22	26	40	60	45	2.7	20	60	15	25
ZP-44-6-6-SC/WC	8	12	15	22	32	32	4.0	20	60	15	25
ZP-44-10-10-SC/WC	4	6	7	10	16	15	8.3	8	25	7	10
ZP-64-3.5-3.5-SC/AC	15	25	30	42	65	65	2.0	25	75	20	30
ZP-64-6-6-SC/AC	10	15	20	26	36	36	3.5	25	75	20	30
ZP-64-10-10-SC/WC	5	6	8	13	22	18	7.0	10	30	8	12
ZPS-80-3.5-3.5-SC/WC	18	30	36	50	70	70	1.8	30	80	25	35
ZPS-80-6-6-SC/WC	12	20	23	33	45	45	2.7	30	80	25	35
ZPS-80-10-10-SC/WC	7	9	10	16	29	30	4.2	15	40	12	18
ZPS-80-15-15-SC/WC	5	7	8	11	19	20	6.2	12	31	10	15
ZPS-96-3.5-3.5-SC/AC	20	35	40	60	80	80	1.6	35	90	30	40
ZPS-96-6-6-SC/WC	13	21	24	35	50	50	2.5	35	90	30	40
ZPS-96-10-10-SC/WC	8	10	11	17	35	35	3.6	20	45	14	20
ZPS-96-15-15-SC/WC	5.5	7.5	8.5	11.5	29.5	30.5	4.1	12.5	31.5	10.5	15.5

Model	Live Load Capacity Watts					Electrical Power Requirements Full Load Amps <sup>1</sup>		
	-18°C	-34°C	-40°C	-54°C	-68°C	208/230V, 1 Phase	208/230V, 3 Phase	460V, 3 Phase
ZP-8-2-2-H/AC	-	-	1200	900	600	49	36	-
ZP-8-3.5-3.5-SC/AC	-	-	1700	1200	750	-	48	29
ZP-16-2-2-H/AC	-	-	1800	1200	600	49	36	-
ZP-16-3.5-3.5-SC/AC	-	-	2000	1600	1000	-	48	29
ZP-16-6-6-SC/WC	-	-	3000	2400	1500	-	65	29
ZP-32-2-2-H/AC	-	-	1500	1100	600	49	36	-
ZP-32-3.5-3.5-SC/AC	-	-	2000	1600	1000	-	48	29
ZP-32-6-6-SC/WC	-	-	3000	2400	1500	-	65	29
ZP-44-3.5-3.5-SC/AC	-	-	1700	1300	700	-	48	29
ZP-44-6-6-SC/WC	-	-	2700	2100	1200	-	65	29
ZP-44-10-10-SC/WC	-	-	4500	3500	2000	-	-	45
ZP-64-3.5-3.5-SC/AC	-	-	1500	1100	500	-	48	29
ZP-64-6-6-SC/WC	-	-	2500	2100	1000	-	65	29
ZP-64-10-10-SC/WC	-	-	4500	3500	2000	-	-	45
ZPS-80-3.5-3.5-SC/WC	-	-	1500	1100	500	-	48	29
ZPS-80-6-6-SC/WC	-	-	2500	2100	1000	-	65	29
ZPS-80-10-10-SC/WC	-	-	4500	3500	2000	-	-	45
ZPS-80-15-15-SC/WC	-	-	5500	4500	3000	-	-	53
ZPS-96-3.5-3.5-SC/AC	-	-	1500	1100	500	-	48	29
ZPS-96-6-6-SC/WC	-	-	2500	2100	1000	-	65	29
ZPS-96-10-10-SC/WC	-	-	4500	3500	2000	-	-	45
ZPS-96-15-15-SC/WC	-	-	5500	4500	3000	-	-	53

Performance is based on 230V, 60 Hz. operation and a 24°C ambient. Lower voltages will extend heating performance. For 50 Hz performance, please refer to the 95000-I, Z-Plus international brochure. Specifications are subject to change.

<sup>1</sup> Electrical requirements based on temperature only units. Amperage may increase on humidity models. See quotation for actual values.

<sup>2</sup> From +85°C to -40°C