

High-Performance Readout Pyrometers

With Parallax Mirror Display

7000 Series
Starts at

7035-T-100, shown
smaller than actual size.



- ✓ Self-Powered
- ✓ Taut Band Mechanism Standard
- ✓ Phenolic Fronts
- ✓ Glass Windows
- ✓ Proven Reliability
- ✓ Accurate Measurement and Display
- ✓ Wide Selection of Ranges
- ✓ 3 Choices of Mounting: Front-Panel, Bezel, or Bench Stand



7035-J-300, shown
smaller than actual size.

Thermocouple Ranges

Standard Ranges		
T/C	°C	°F
T	-130 to 40	-200 to 100
J	-100 to 120	-150 to 250
	-70 to 310	-100 to 600
	-60 to 110	-75 to 225
	0 to 150	0 to 300
	0 to 260	0 to 500
	0 to 430	0 to 800
K	0 to 500	0 to 1000
	0 to 800	0 to 1500
	0 to 1100	0 to 2000
R	0 to 1370	0 to 2500
	0 to 1650	0 to 3000

Thermocouple Specifications

Thermistor-type copper error compensation. Current sensitivity is approximately 4 Ω/mV (250 mA). Automatic bimetal cold-junction compensation for changes in ambient temperature. Mirrored scales with knife edge pointers are standard on all pyrometer models.

OMEGA® Series 7000 meters have thermocouple ranges calibrated for 10 Ω external resistance and are supplied with an adjustable 10 Ω resistor for use with thermocouples of lower resistance.

Specifications

Accuracy: ±2%
Tracking: None
Balance: ±1%
Repeatability (Taut Band Mechanism): <¼%

*Effects of shock, vibration, humidity and temperature are equal to or better than ANSI C39.1 - 1981.
Safety (dielectric test, leakage and other hazards): instruments are equal to or better than ANSI C39.5 - 1974.
The above tolerance limits apply to the standard ranges listed in this bulletin.
Special instruments may vary from these limits. Rated circuit to ground voltage = 80 Vms (1100 peak)*

Bezel Mount Style

3 Mounting Styles

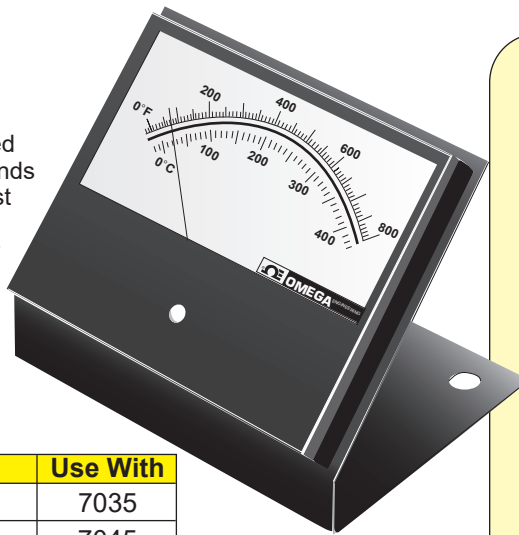
- 1) Front-Panel Mount Standard
- 2) Rear-Panel Mount Using Bezel Mounting Kit (See Below)
- 3) Bench Stands (Models: S-35, S-45, S-55— See Next Page)

Bezel Mounting Kits

Model No.	Use with
7045-BMK	7045
7055-BMK	7055

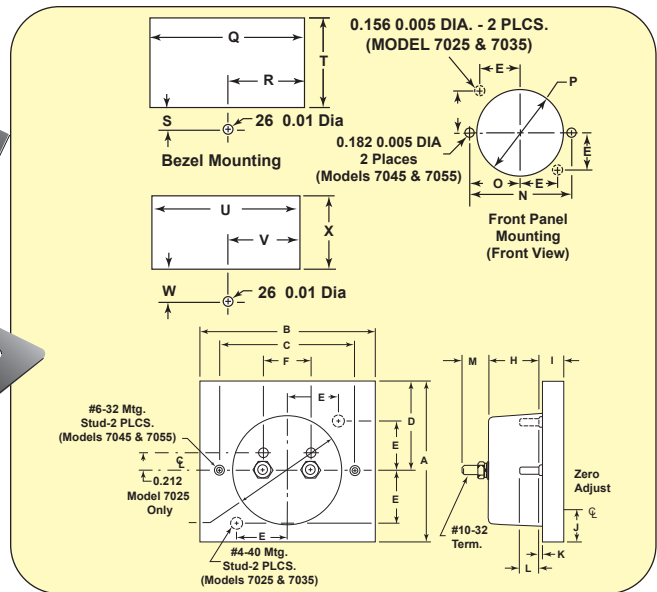
Series 7000 Bench Stands

Heavy-gage anodized aluminum bench stands are available for most pyrometer models. These simplify many laboratory applications. See table for model and part numbers.



Bench Stands

Model No.	Use With
S-35	7035
S-45	7045
S-55	7055



Model No.	A	B	C	D	E	F	G	H	I	J	K	L
7035	3.04 max	3.5 max	—	1.53 max	1.125 ±0.01	1.25 ±0.01	2.79 max	1.37 max	0.60 max	0.53 ±0.02	0.02 max	0.56 ±0.02
7045	4.09 max	4.64 max	3.5 ±0.01	2.29 ±0.03	—	1.25 ±0.01	2.79 max	1.37 max	0.60 max	0.77 ±0.02	0.02 max	0.56 ±0.02
7055	4.53 max	5.66 max	4.50 ±0.01	2.695 ±0.02	—	1.25 ±0.01	2.79 max	1.37 max	0.58 max	0.845 ±0.02	0.02 max	0.56 ±0.01
Model No.	M	N	O	P	Q	R	S	T	U	V	W	X
7035	0.675 Max	—	—	2.810 ±0.15	3.718 +0.030 -0.000	1.859 +0.015 -0.000	— 0.44 ±0.01	2.156 +0.030 -0.000	3.105 ±0.015	1.552 ±0.008	0.76 ±0.01	1.515 ±0.015
7045	0.675 max	3.50 ±0.01	1.750 ±0.005	2.810 ±0.015	4.812 +0.030 -0.000	2.406 +0.015 -0.000	— 0.63 ±0.01	2.75 +0.03 -0.00	4.205 ±0.015	2.102 ±0.008	0.95 ±0.01	2.125 ±0.015
7055	0.675 max	4.50 ±0.01	2.250 ±0.005	2.810 ±0.015	5.875 +0.030 -0.000	2.937 +0.015 -0.000	— 0.64 ±0.01	3.156 -0.000	5.240 ±0.015	2.620 ±0.008	0.98 ±0.01	2.500 ±0.015

MOST POPULAR MODELS HIGHLIGHTED!

Model 7035 (2% accuracy)		Model 7045 (2% accuracy)		Model 7055 (2% accuracy)		Temperature Ranges		Thermocouple*	ANSI Type
Model No.	Model No.	Model No.	Model No.	°C	°F				
7035-T-100	7045-T-100	7055-T-100		-130 to 40	-200 to 100	Cu/C	T		
—	7045-T-250	7055-T-250		-100 to 140	-150 to 250	Cu/C	T		
—	7045-T-225	—	—	-60 to 100	-75 to 225	Cu/C	T		
7035-J-250	7045-J-250	7055-J-250		-100 to 120	-150 to 250	I/C	J		
7035-J-600	7045-J-600	7055-J-600		-70 to 310	-100 to 600	I/C	J		
7035-J-225	7045-J-225	7055-J-225		-60 to 110	-75 to 225	I/C	J		
7035-J-300	7045-J-300	7055-J-300		0 to 150	0 to 300	I/C	J		
7035-J-500	7045-J-500	7055-J-500		0 to 260	0 to 500	I/C	J		
7035-J-800	7045-J-800	7055-J-800		0 to 430	0 to 800	I/C	J		
7035-J-1000	7045-J-1000	7055-J-1000		0 to 500	0 to 1000	I/C	J		
7035-K-1000	7045-K-1000	7055-K-1000		-20 to 540	0 to 1000	C/A	K		
7035-K-1500	7045-K-1500	7055-K-1500		0 to 800	0 to 1500	C/A	K		
7035-K-2000	7045-K-2000	7055-K-2000		0 to 1100	0 to 2000	C/A	K		
7035-K-2500	7045-K-2500	7055-K-2500		0 to 1370	0 to 2500	C/A	K		
7035-E-225	—	7055-E-225		-60 to 110	-75 to 225	Ch/C	E		
7035-E-300	7045-E-300	7055-E-300		0 to 150	0 to 300	Ch/C	E		
—	—	7055-E-500		0 to 260	0 to 500	Ch/C	E		
7035-E-800	—	7055-E-800		0 to 430	0 to 800	Ch/C	E		
—	—	7055-E-1500		0 to 800	0 to 1500	Ch/C	E		
7035-R-3000	7045-R-3000	7055-R-3000		0 to 1650	0 to 3000	Pt/Pt 13% Rh	R		
—	—	7055-S-3000		0 to 1650	0 to 3000	Pt/Pt 10% Rh	S		

Comes complete with operator's manual.

* Cu/C signifies copper vs. constantan. I/C signifies iron vs. constantan.

Ch/C signifies CHROMEGA® vs. constantan.

C/A signifies CHROMEGA® vs. ALOMEGA®.

Ordering Examples: 7035-J-250, high performance readout pyrometer, Type J thermocouple, pyrometer, Type K thermocouple,

7045-K-1000, high performance readout



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