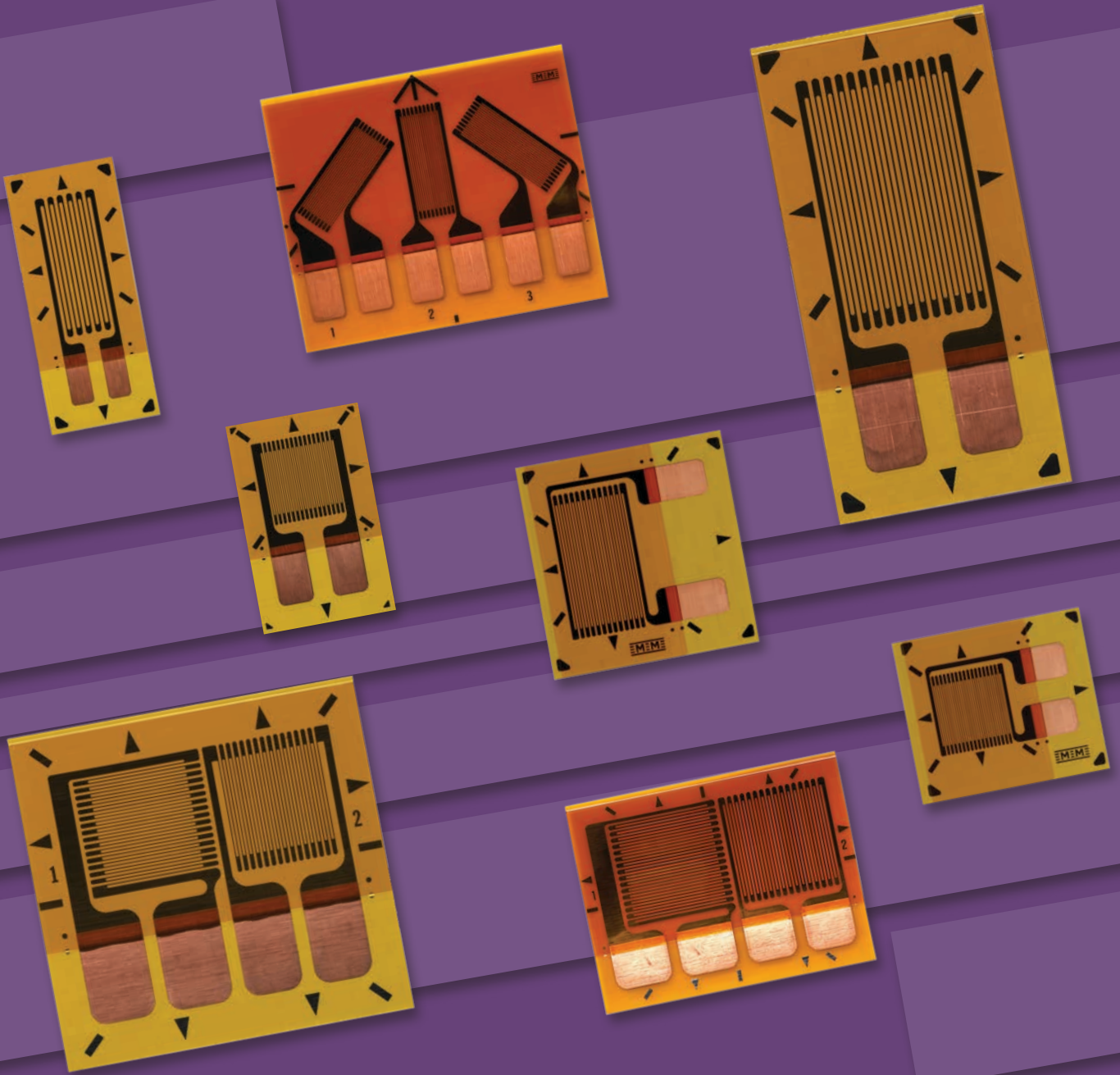


CHA Series

Stress Analysis Strain Gages Designed for
Enhanced Humidity Protection

Product Overview



Stress Analysis Strain Gages Designed for Enhanced Humidity Protection

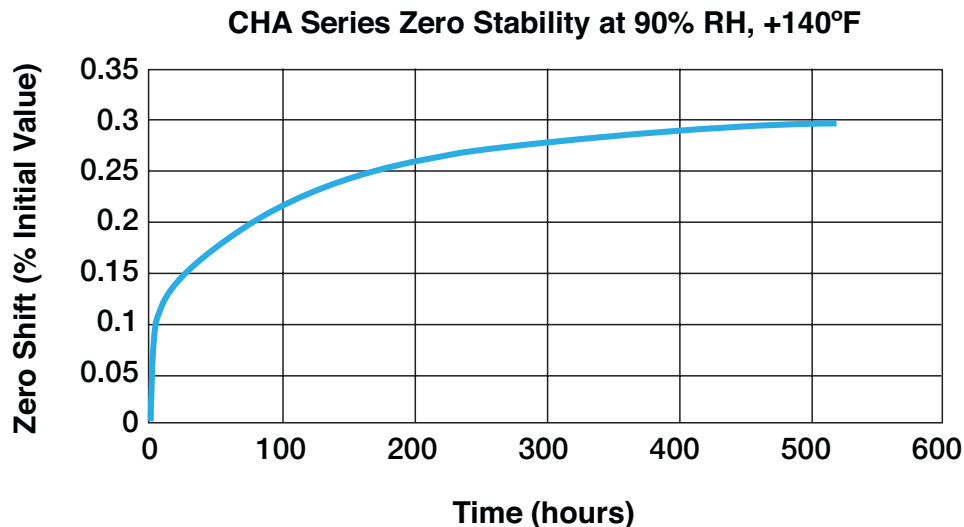
Micro Measurements has a long history of building the CEA Series strain gages, which have proved to be a worldwide industry leader in the field of stress analysis and one of the most popular Micro-Measurements strain gages ever introduced. We are proud to announce that we have created a humidity resistant version of this strain gage, the CHA Series, that has better humidity performance than ever before which makes it the ideal choice for the most demanding applications such as humidity conditioned composite materials. This new construction was built using ASTM-5229 “Standard Test Method Absorption Properties and Equilibrium Conditioning of Polymer Matrix Composite Materials” as guidance. The CHA Series strain gages are currently available in several uniaxial, tee rosette, and rectangular rosette configurations.









CHA Model Specifications:

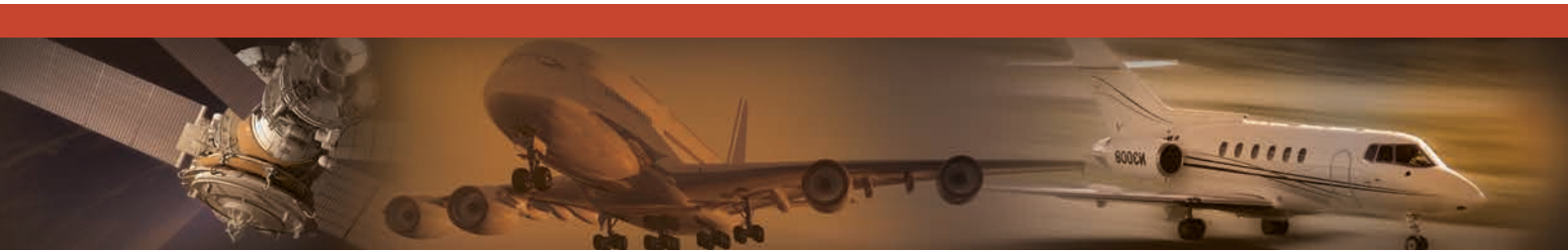
- Carrier Matrix:** Provides an encapsulated strain gage with a high performance cast polyimide backing
- Connection:** Larger integral copper coated tabs
- Temperature Range:** -100° to +350°F (-75° to +175°C)
- Strain Range:** ±3% for all gage lengths, ±5% for gage lengths of 0.250 inch or greater
- Fatigue Life:** ±1500 microstrain for 10⁶ cycles

CHA Features and Benefits	A Variety of Gage Geometries
Larger copper coated tabs for easier leadwire connection	Uniaxial
Cast polyimide backing for flexibility and toughness	Tee-rosette
Protective encapsulation film with enhanced moisture protection for the most demanding applications	Rectangular rosette

Test Data for the CHA Series performed using ASTM-5229 as guidance



Gage Listings – Dimensions in inches (mm). ES = Each Section, CP = Complete Pattern								
Gage Pattern (Actual Size)	Gage Length	Grid Width	Overall Length	Overall Width	Matrix Length	Matrix Width	Gage Designation (XX = STC)	Resistance in Ohms
 125UW	0.125 (3.18)	0.180 (4.57)	0.325 (8.25)	0.180 (4.57)	0.42 (10.66)	0.27 (6.85)	CHA-XX-125UW-350	350 ± 0.6%
 250UN	0.250 (6.35)	0.120 (3.04)	0.415 (10.54)	0.120 (3.04)	0.52 (13.20)	0.22 (5.58)	CHA-XX-250UN-350	
 250UW	0.250 (6.35)	0.180 (4.57)	0.450 (11.43)	0.180 (4.57)	0.55 (13.97)	0.27 (6.85)	CHA-XX-250UW-350	
 125UB	0.125 (3.18)	0.160 (4.06)	0.185 (4.69)	0.290 (7.36)	0.34 (8.63)	0.39 (9.90)	CHA-XX-125UB-350	
 250UB	0.250 (6.35)	0.160 (4.06)	0.310 (7.87)	0.320 (8.12)	0.42 (10.66)	0.42 (10.68)	CHA-XX-250UB-350	
 125UT	0.125 (3.18)	0.165 (4.19)	0.325 (8.25)	0.365 (9.27)	0.42 (10.66)	0.45 (11.43)	CHA-XX-125UT-350	
 250UT	0.250 (6.35)	0.290 (7.366)	0.450 (11.43)	0.650 (16.5)	0.55 (13.97)	0.74 (18.79)	CHA-XX-250UT-350	
 250UR	0.250 (6.35)	0.120 (3.04)	0.500 (12.7)	0.760 (19.30)	0.65 (16.51)	0.80 (20.32)	CHA-XX-250UR-350	



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