

# NATIONAL TYPE EVALUATION PROGRAM

# Certificate of Conformance for Weighing and Measuring Devices

For:

Load Cell Single Point

Model: SP-CG Series (see page 2)

n<sub>max</sub>: 5 000

Capacity: 10 to 100 kg

Accuracy Class: III, Single Cell

\*Submitted By: Contact Info. Updated: December 09

Coti Global Sensors, Inc.

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## **Standard Features and Options**

### **Standard Features:**

- Aluminum Construction
- Method of Sealing: Potted; Bolted on Aluminum Cover (Model SP-CG-40 only)
- Number of Wires: 4 wires
- Excitation Voltage: 10 VDC
- Nominal Output: 2.0 mV/V
- Bridge Resistance Input Nominal: 350 ohms

Temperature Range: -10 °C to 40 °C (14 °F to 104 °F)

This device was evaluated under the National Type Evaluation Program and was found to comply with the applicable technical requirements of "NIST Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Randy Jennings

Chairman, NCWM, Inc.

Judy Cardin

Chairman, National Type Evaluation Program Committee

Issued: December 22, 2009

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## Coti Global Sensors, Inc.

Load Cell / SP-CG Series

Application: These load cells may be used in Class III scales for single cell applications consistent with the model designations, number of scale divisions, and parameters specified in this certificate. Load cells of a given accuracy class may be used in applications with lower accuracy class requirements provided the number of scale divisions, the  $v_{min}$  values, and temperature range are suitable for the application. The manufacturer may market the load cells with fewer scale divisions ( $n_{max}$ ) and with larger  $v_{min}$  values than those listed on the certificate. However, the load cells must be marked with the appropriate  $v_{min}$  and  $v_{min}$  for which the load cell may be used.

#### **Load Cell Parameters:**

Models	Capacity (kg)	v <sub>min</sub> (kg)	Minimum Dead Load (kg)
SP-CG-40, SP-CG-42, SP-CG-22, SP-CG-PWA	10	0.001	0.20
SP-CG-40, SP-CG-42, SP-CG-22, SP-CG-PWA	15	0.0015	0.30
SP-CG-40, SP-CG-42, SP-CG-22, SP-CG-PWA	20	0.002	0.40
SP-CG-40, SP-CG-42, SP-CG-22, SP-CG-PWA	30*	0.003	0.60
SP-CG-40, SP-CG-42, SP-CG-22, SP-CG-PWA	50	0.005	1.00
SP-CG-40, SP-CG-42, SP-CG-22, SP-CG-PWA	60	0.006	1.20
SP-CG-40, SP-CG-42, SP-CG-22, SP-CG-PWA	75	.0075	1.50
SP-CG-40, SP-CG-42, SP-CG-22, SP-CG-PWA	100	.0100	2.00

<sup>\*</sup> Load Cell Tested

<u>Identification</u>: A pressure sensitive identification badge containing the manufacturer, model designation, and serial number is located on the load cell. All other required information, if not marked on the load cell, must be on an accompanying document including the serial number of the load cell.

<u>Test Conditions</u>: This certificate supersedes Certificate of Conformance number 06-115 and is issued to indicate transfer of the NTEP Certificate of Conformance from Coti, Inc. to Coti Global Systems, Inc. The NTEP Certificate of Conformance 06-115, though inactive, remains in effect to cover those devices previously sold and installed under the original name. Previous test information and documentation provided by the company was reviewed. The test conditions for the original type evaluation are listed below for reference.

Certificate of Conformance Number 06-115: Test data was analyzed for two 30 kg load cells. The load cells were tested using dead weights as the reference standard. The cells were tested over a temperature range of -10 °C to 40 °C. Three tests were run at each temperature. The temperature effect on zero was measured and a time dependence (creep) test was performed. The data was then analyzed for single load cell applications. The barometric pressure test was waived due to the insensitivity of the load cell design to changes in barometric pressure.

**Evaluated By:** John Latham (CA) and Ken Jones (CA)

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2006. NCWM, Publication 14: Weighing Devices, 2006.

<u>Conclusion</u>: The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

Information Reviewed By: S. Patoray, L. Bernetich (NCWM) 06-115; J. Truex (NCWM) 08-075





# Coti Global Sensors, Inc.

Load Cell / SP-CG Series

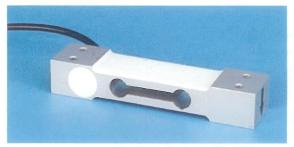
# **Examples of Device:**



Model SP-CG-40



Model SP-CG-42



Model SP-CG-22



Model SP-CG-PWA