

## Continuous Level Indicator Thermo Ramsey C-Level.

Continuous level measurement  
for bins and vessels.

**Accuracy: from  $\pm 2\%$ .**

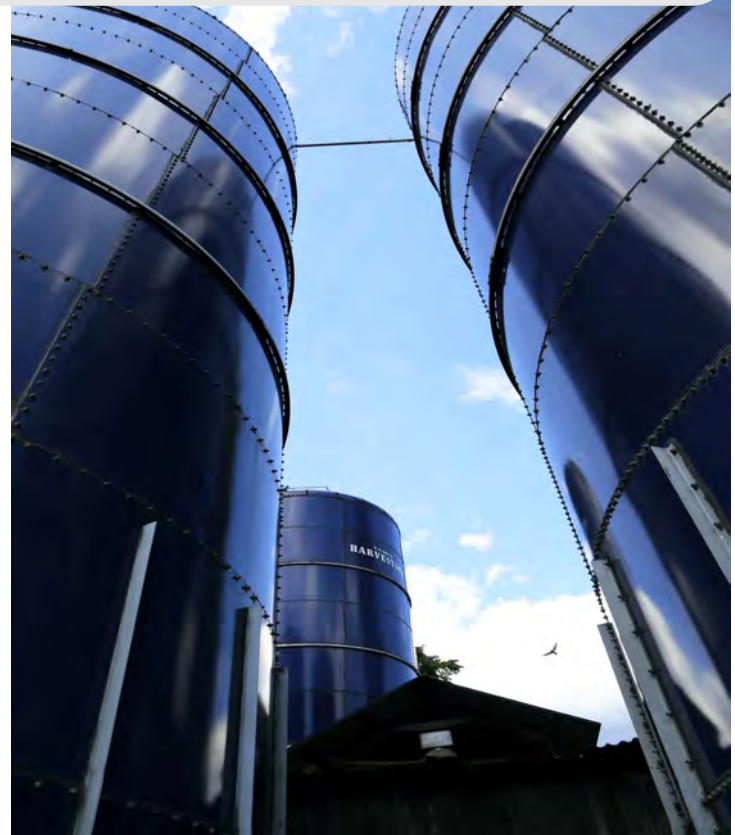


### Continuous Level Indicator

The Thermo Ramsey C-Level continuous level indicator's unique precision strain gauge sensors are press-fit into a vessel's support structure, so there is no concern for failure or maintenance issues caused by difficult materials or harsh process environments. This ensures that your process operates at its optimum level of performance. Using the C-Level continuous level indicator will minimize the maintenance required.

The C-Level continuous level indicator is ideally suited for inventory monitoring and process control during the load-out or filling of bins and vessels containing bulk solids or liquids. Due to its unique precision strain gauge sensors being press-fit into the vessel's support structure, the system can operate without concern for failure or maintenance issues caused by the monitored material or process environment. This distinctive design also compensates for temperature changes that can affect the accuracy of other types of sensors.

Accurate to within  $\pm 2\%$  depending on the application, the C-Level indicator is unaffected by corrosive or abrasive materials, uneven material discharge, build-up on sidewalls, bridging, rat-holing or dusting. This makes it a real alternative to conventional level measuring methods.



### Features and Benefits

- Precision electronic and hermetically-sealed stainless steel strain sensor.
- Sensor mounted externally to the bin, which eliminates contamination or corrosion that can result from contact with the monitored product.
- Incorporation of the sensor as an integral part of the support member cancels temperature effects common to so-called „bolt-on“ sensors.

# LEVEL INDICATOR C-LEVEL

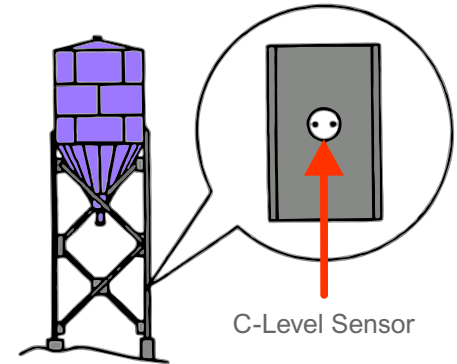


## Technical Specifications:

### C-Level Strain Sensor:



|                        |                                 |
|------------------------|---------------------------------|
| Enclosure:             | Stainless steel 1.4301 AISI 304 |
| Connection cable:      | PVC cable, 30 cm or 10 m        |
| Installation:          | Press fit in precision bore     |
| Supply voltage:        | 10 V DC                         |
| Signal output:         | 1 mV/V                          |
| Operating Temperature: | -40°C ... +65°C                 |



C-Level Sensor

### C-Level CL100A Control Unit:



|                        |  |
|------------------------|--|
| Enclosure:             | Polystyrene plastic, weather-tight                                   |
| Type of protection:    | IP 64  |
| Operating Temperature: | -10°C ... +50°C<br>(temperatures down to -40°C will not damage unit) |
| Supply voltage:        | 120 / 240 V AC; -15% ... +10%; 48 ... 62 Hz                          |
| Current consumption:   | < 10 W   |
| Outputs (standard):    | 3 SPDT dry contacts, 5 A at 250 V AC (thresholds MIN / MAX / 102%)   |
| Outputs (optional):    | Analogue output 0 / 4 ... 20 mA, proportional to level indication    |
| Display:               | 50-segment LED bar graph; 2% increments                              |
| Certifications:        | CE   |

### MINI 11-100-DCL-RC-P Control Unit:



|                        |  |
|------------------------|--|
| Enclosure:             | DIN standard 144 x 72 mm   |
| Type of protection:    | Front panel: IP 54; enclosure: IP 00   |
| Operating Temperature: | 0°C ... +40°C  |
| Storage temperature:   | -20°C ... +70°C  |
| Supply voltage:        | 110 / 220 V AC; -15% ... +10%; 48 ... 62 Hz  |
| Outputs:               | 4 SPDT; 0.5 A at 240 V AC (thresholds, fault)<br>1 analogue output 0 / 4 ... 20 mA or 20 ... 0 / 4 mA<br>1 serial interface Rs485 (optional) |
| Display:               | LCD with backlighting;<br>8 mm height; 16-digit alphanumeric   |
| Certifications:        | CE   |

### MINI 11-100-DCL-RC-F Control Unit:



|                        |   |
|------------------------|---|
| Enclosure:             | Polycarbonate plastic, weather-tight  |
| Type of protection:    | IP 64; NEMA-4X  |
| Operating Temperature: | 0°C ... +40°C   |
| Storage temperature:   | -20°C ... +70°C   |
| Supply voltage:        | 110 / 220 V AC; -15% ... +10%; 48 ... 62 Hz   |
| Outputs:               | 4 SPDT; 0.5 A at 240 V AC (thresholds, fault)<br>1 analogue output 0 / 4 ... 20 mA or 20 ... 0 / 4 mA<br>1 serial interface RS485 |
| Display:               | LCD with backlighting;<br>8 mm height; 16-digit alphanumeric  |
| Certifications:        | CE  |



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*Any question?*

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