

# Rosemount™ CT4215

## Leak Detection System



Rosemount is the global leader of leak detection systems for the aerosol, food, and pharmaceutical industries. The Rosemount CT4215 is an in-line system that tests 100 percent of packages going through the production line for seal integrity. Our patented Quantum Cascade Laser (QCL) technology offers high speed detection of trace gases from defective packs and rejects them instantaneously without slowing down or disrupting the production line.

## Features and benefits

- Measures up to 200 packs per minute, up to 20 times faster than the competition.
- 100 percent of products that pass through the production line are tested in real time.
- Fully automated detection and rejection of defective products without interfering with the production line.
- Small footprint, easy to install on new or retrofit onto existing production lines.
- Patented QCL technology detects leaks at a sensitivity of 0.2 mm (0.008 in.).
- Low maintenance costs for the lifetime of the system.

**Note**

Leak detection sensitivity can be affected by leak location, gas mix, and background gas levels.

## Applications

Products	Packaging type	Gases
Meat, dairy, vegetables, bread, pasta, drinks, and more	Trays, pouches, bags, cans, and bottles	CO <sub>2</sub> , CO, N <sub>2</sub> O, and ethanol

**Contents**

Features and benefits..... 2

Applications..... 2

Specifications..... 3

Recommended installation..... 5

## Specifications

Please consult Rosemount if your requirements are outside the specifications listed below. Improved performance, other products, and material offerings may be available depending on the application.

<b>Overview</b>	
Product	Rosemount CT4215
Application	In-line leak detection
IR source	Quantum Cascade Laser (QCL)
Measurement technique	IR absorption spectroscopy
Laser classification	Class I
<b>Performance</b>	
Sensitivity	0.2 mm (0.008-in.) diameter <sup>(1)</sup>
Packs per minute	200
Pack dimension	Up to 9-in. (228.6 mm) width, height adjustable
Filled gases including	CO <sub>2</sub> , N <sub>2</sub> O, CO, ethanol
<b>Environmental</b>	
Temperature range	23 to 86 °F (-5 to 30 °C)
Humidity range	95%
<b>Utilities</b>	
Power supply	120 Vac 60 Hz/240 Vac 50 Hz
Power consumption	600 W
Compressed air supply	Max. 25 L/min, 8 to 10 bar (115 to 145 psi)
<b>Interface</b>	
HMI	LCD display touch screen
PLC	Touch panel
Traffic light	Red, green
<b>Control/software</b>	
Rejection	Automated
Reporting	Production log
System health	Status lamp
Line stop	Configurable
<b>Inputs/outputs</b>	
Digital IN	Line status
Digital OUT	System health
<b>Dimensions</b>	
W x D x H	28 x 29 x 73-in. 703 x 732 x 1852 mm

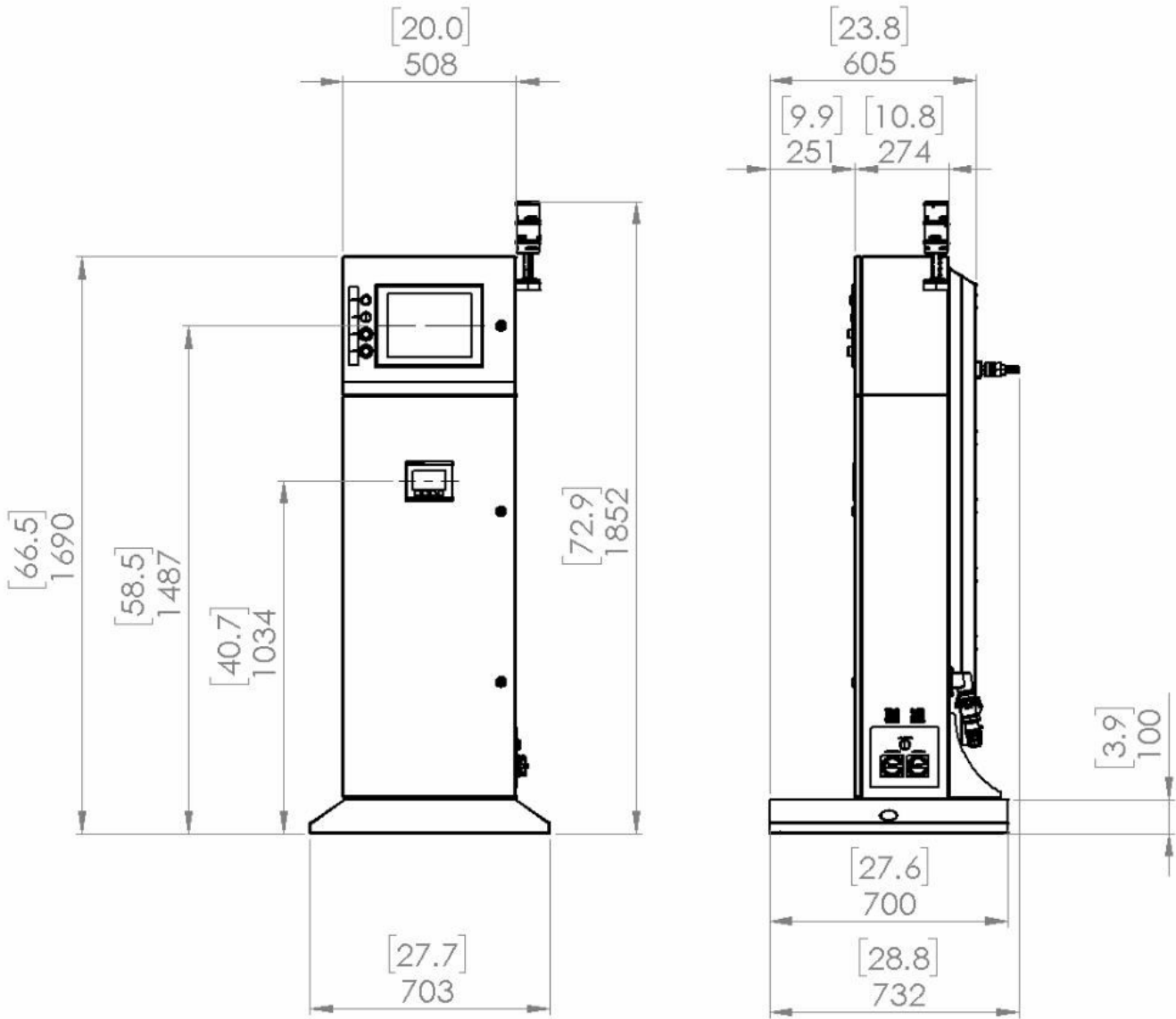
Weight	285 lb. (129 kg)
Footprint on line	47 x 31-in. 1200 x 800 mm

(1) *Leak detection sensitivity can be affected by leak location, gas mix, and background gas levels.*

# Recommended installation

The drawings below represent the minimum recommended installation guidelines for the Rosemount CT4215 Leak Detection System. Please consult Rosemount customer services for detailed installation recommendations for your application.

**Figure 1: Rosemount CT4215 Leak Detection System Dimensions**



Dimensions are in millimeters with inches in brackets.

#### CASCADE TECHNOLOGIES

Castle Business Park  
Stirling FK9 4TZ  
Scotland

+44 1786 447 721  
+44 1786 475 822  
QCL.CSC@Emerson.com

#### EUROPE

Emerson Automation Solutions  
Neuhofstrasse 19a PO Box 1046  
CH-6340 Baar  
Switzerland

+41 (0) 41 768 6111  
+41 (0) 41 768 6300  
QCL.CSC@Emerson.com

#### GLOBAL HEADQUARTERS

Emerson Automation Solutions  
6021 Innovation Blvd  
Shakopee, MN 55379, USA

+1 800 999 9307 or +1 952 906 8888  
+1 952 949 7001  
QCL.CSC@Emerson.com

#### MIDDLE EAST AND AFRICA

Emerson Automation Solutions  
Emerson FZE  
Jebel Ali Free Zone  
Dubai, United Arab Emirates, P.O. Box 17033

+971 4 811 8100  
+971 4 886 5465  
QCL.CSC@Emerson.com

#### AMERICAS


Emerson Automation Solutions  
10241 West Little York, Suite 200  
Houston, TX 77040 USA


+1 866 422 3683 or +1 713 396 8880  
+1 713 466 8175  
QCL.CSC@Emerson.com

#### ASIA-PACIFIC


Emerson Automation Solutions  
1 Pandan Crescent  
Singapore 128461  
Republic of Singapore

+65 6 777 8211  
+65 6 777 0947  
QCL.CSC@Emerson.com

 [Linkedin.com/company/Emerson-Automation-Solutions](https://www.linkedin.com/company/Emerson-Automation-Solutions)

 [twitter.com/rosemount\\_news](https://twitter.com/rosemount_news)

 [Facebook.com/Rosemount](https://www.facebook.com/Rosemount)

 [youtube.com/RosemountMeasurement](https://www.youtube.com/RosemountMeasurement)

©2019 Emerson. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co. Rosemount is a mark of one of the Emerson family of companies. All other marks are the property of their respective owners.