

## Securing your cold chain with Real - Time Remote Temperature Monitoring

The Dulas Vaccine Guard is a self-contained wireless device used to record and report the temperature inside vaccine refrigerators, sending information to a simple dashboard that the customer can monitor.

Vaccine Guard automatically measures and records the temperature of your cold chain equipment every ten minutes. If the temperature varies from the specified range, the Vaccine Guard immediately alerts the customer via SMS and/or email.

Once the device is registered the customer can access all the temperature records remotely via the secure web portal. The securely stored results are accessible online via the Vaccine Guard dashboard.

Automated reports are delivered by email which provide evidence of cold chain performance quality and support optimisation to ensure compliance with standards.

Applying Remote Temperature Monitoring technology to vaccine storage is a simple way to improve the reliability of cold chain equipment, facilitate maintenance and ensure fewer vaccines are spoiled.



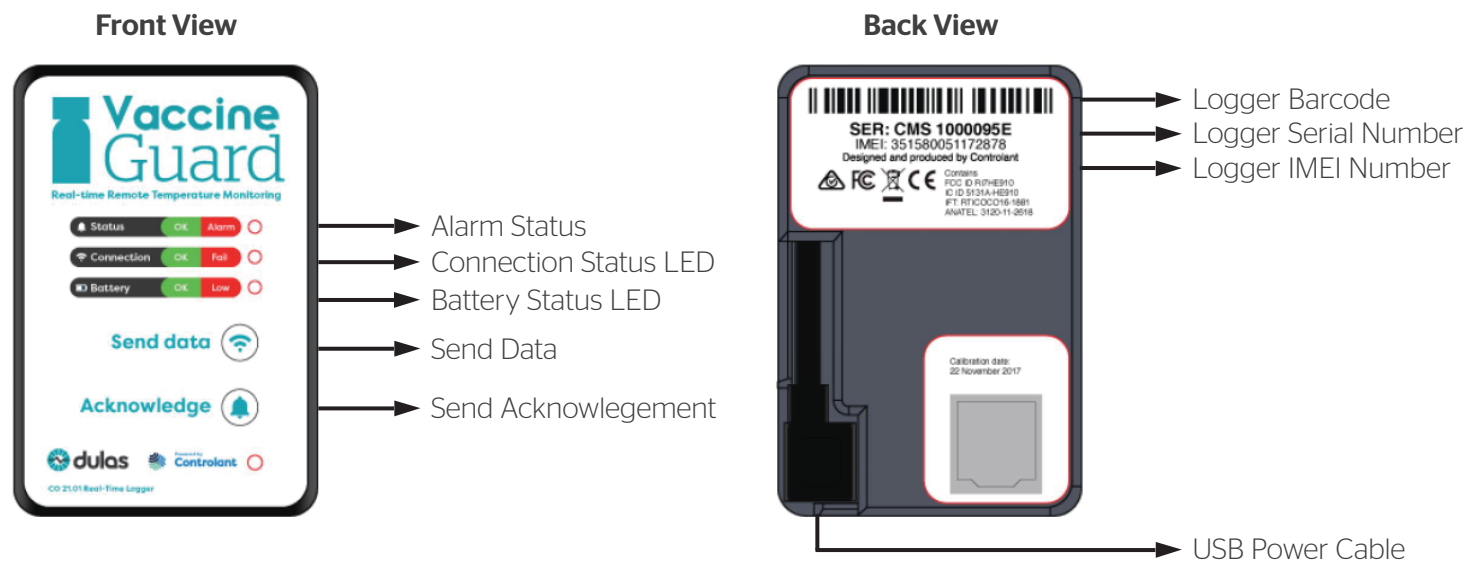
### Key Features:

- Integrates with all cold chain equipment for automatic cloud based real-time monitoring
- 24/7 visibility and secure data access via a web portal to monitor your cold chain performance
- Real-time alerts by SMS and/or email enable immediate action to avoid vaccine wastage
- Automated reports delivered by email
- Simple, secure and robust data collection
- Fixed price, low cost, temperature monitoring solution
- Guards your vaccines and saves lives



All Dulas Refrigerators are available with integrated Vaccine Guard Remote Temperature Monitoring Devices.

# User interface



## Technical Overview

Available sensors:	Vaccine Temperature Ambient Temperature Battery Status
Operating Environment:	-20°C to 50°C, 0-99% RH (noncondensing)
Temperature calibration range:	20°C to -30°C
Temperature sampling rate:	10 minute log interval
Temperature measurement accuracy:	Resolution: 0.1°C Accuracy: 0.5°C
Cloud Reporting:	Data is automatically uploaded to the Cloud at 24 hour intervals (GSM service required)
Log Memory Data Storage:	Stores 60 days of temperature log in memory when no cloud connection is available
General Characteristics:	ABS plastic enclosure
Physical Size:	20mm x 61mm x 91mm
Power Options:	Rechargeable lithium battery 1800mAh / UN38.3 certified Operates on a single charge for 180 days
Wireless:	GSM 3G 2G
Certificates:	CE, FCC, IC, Anatel, ACMA
Sim card:	Vodafone Global