

RealityCheck[™] AD

Detect Anomalies, Monitor Equipment, Test Products



AI-DRIVEN MACHINE-LEVEL ANALYTICS FOR THE FACTORY

RealityCheck[™] AD is a ready-to-implement anomaly detection solution for monitoring factory and process-industry assets. It is a complete hardware and software solution for equipment monitoring and end-of-line testing for quality control. Users can deploy an edge node with one or more included sensors and immediately begin monitoring production equipment for unusual or anomalous functions. Just attach a Renesas edge node plus sensor and automatically generate a baseline anomaly detection model. Over time, build your anomaly database and train additional models for detecting or predicting specific faults or for predicting the remaining useful life of components. We offer a range of sensor options, including ones certified for corrosive or explosive environments.

Self-learning Edge Nodes

Renesas-based edge node and hardware



Reality AI Tools® Software

Award-winning software for automatic ML model generation for anomaly detection, signal classification, and remaining-useful-life prediction



Selection of Sensors

Selection of accelerometers and mics for different use cases. Explosion-proof options available, if needed



REALITYCHECK™ AD

Key Features

- Edge node learns automatically and begins detecting anomalies
- Baseline and anomalous data can be further analyzed by Reality Al Tools
- Generates results within hours, improve over time, and add detectors for specific conditions or remaining-useful life of components
- Interfaces for factory dashboard and workflow systems

Benefits



Reduce costs associated with unnecessary downtime



Improve quality with automated end-of-line testing



Al Engineering workstation for understanding models in time/frequency domains



Full turnkey solution from sensor and edge node via Al modeling and dashboarding

RealityCheck[™] AD Demo Example

Monitor Activity and Review Anomalies

								f Filter II
Device ID 11	State 11	Monitored Target 11	Deployed Tool 11	Sensor 11	Facility	Location 11	mgit topic 11	
734	LIVE	Conveyor motor drive	AD model v0	Phidget Accelerometer 1043	Bay 10	Peoria, IL	/RealityAl-AD/734/#	l .
				Anomaly State Timeline				
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Activity Monitoring



For more info visit: renesas.com/realityai

 Renesas Electronics America Inc.
 renesas.com

 1001 Murphy Ranch Road, Milpitas, CA 95035
 Phone: 1-888-468-3774

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