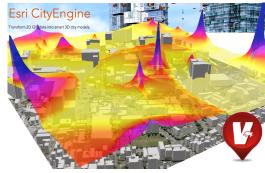
# 

# MONITOR ANYTHING, ANYWHERE™

Valarm is a software solution that facilitates rapid deployment of real-time, mobile sensor networks. Valarm connects industry standard sensors to our cloud systems or private networks, using readily available, commodity hardware. Valarm-compatible connector hardware includes common Android devices and other open hardware platforms from multiple vendors.



Air Quality Study (Los Angeles) with Esri CityEngine and ArcScene

Valarm host devices stream geo-tagged, time-stamped sensor data to the Valarm Tools server. The Valarm Tools server may be running in the public cloud (SaaS) or in your private network. The Valarm Tools server makes it easy for your team to map, graph, analyze, export, or *forward sensor data in real-time* to other systems.

Via our APIs, Valarm sensor data can be instantly integrated into powerful real-time geo-event processing systems, such as the Esri GeoEvent Processor.

Your data may also be conveniently exported to multiple formats, or API-connected to ArcGIS Server, ArcGIS Desktop or ArcGIS Online for big data analysis, warehousing, and decision-support roles.

## Oil / Gas / Mining

- VOCs / Air Quality
- Hydrogen Sulfide
- · Other specific gases
- · Vibration / Tilt / Motion
- Equipment monitoring

#### **Agriculture / Forestry**

- Micro-climate
- Soil Moisture
- Frost & Pest Alerting
- Leaf Wetness
- Greenhouse CO2
- Insolation Studies

#### **Facilities / Construction**

- Noise / Vibration
- · Position / Motion
- · Dust / Indoor Air Quality
- Gases (VOCs, CO1, etc)
- · Equipment monitoring

#### **Transport / Logistics**

- Vehicle dynamics
- Driver behavior
- · Special equipment, e.g.
- Snowplows, Refuse trucks

## **Ecology / Environment**

- Water Quality / Pollution
- · Water & Tide levels
- Air Pollution
- Weather & Solar patterns

#### Sensors in General

- Gases
- Temperature / Climate
- Electrical Consumption
- Switches / Dials / Position
- Vibration / Tilt / Distance
- 4-20mA, 0-10V sensors



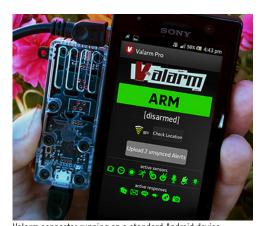
CO2 sensor with Valarm connector running on an Android tablet.



The Valarm Tools cloud server offers quick analysis, graphing, and export of sensor data, with historical query functions and more.



Optional host hardware designed by IntelliDesign Australia. This is a self-contained, fully-connected, multi-sensor unit.



Valarm connector running on a standard Android device.
The sensor is a micro-weather station: temp/humidity/barometer.



The Valarm Tools cloud server integrates Esri ArcGIS Web APIs for immediate analysis and visualization of sensor data.



Valarm APIs connect directly to the Esri GeoEvent Processor. The "push" connector allows easy creation of real-time, geo-aware dashboards and situational-awareness monitors.

#### **About the Company**

Valarm was founded in 2012 by brothers Edward Pultar and Lorenzo Gonzalez.

Edward (President / Spatial Scientist) received his PhD from the University of California, Santa Barbara, where he was the Jack and Laura Dangermond GIS Fellowship recipient.

Lorenzo (CEO / Software Architect) has been a software engineer and system architect for almost 20 years. He has designed and built large-scale systems for Ford, Chrysler, IBM, ESPN, Qualcomm, Farmers Insurance and more.

Valarm software is used in 26 countries around the world.

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Valarm is an Esri Silver Partner and participant in the Esri Emerging Business Program.