



## INTRODUCTION

OVAL is a powerful yet easy-to-use smart sensor system that monitors what's happening around your home or office - quickly sending alerts to your phone or email whenever a sensor is activated. For those new to the IoT - internet of things - space, OVAL is a great first step to creating your smart home or office. For those already familiar with or using smart sensors, you'll find OVAL has the power and flexibility to become a useful addition to your smart home or business.

#### MONITOR

#### RECEIVE





No installation or home integration necessary

Discreet + secure + completely customizable

Setup and control your sensors directly from your smart phone, tablet, or computer

Receive alerts anywhere there is Internet, WiFi or cell / mobile coverage

Receive push notifications, emails, text messages or preprogrammed phone calls

Send alerts simultaneously to up to 13 different people or devices

Connect up to 25 sensors to one network

Long range - sensors can be placed up to 200 feet from the gateway with alerts sent to you worldwide

Long battery life up to 1.5 years with moderate usage + they're easy to purchase + replace

Expandable + upgradeable with external detachable sensors + remote software updates

Custom presets included to get up running quickly

Manage multiple parameters on one sensor simultaneously

## HOW IT WORKS

### GATEWAY



The gateway connects to your Internet connection via a standard Ethernet cable. We use a hard wired solution to add an extra layer of security, reliability, and avoid WiFi's slower speeds and interference.

The gateway communicates with your sensors and relays/receives any information to/from the cloud in the event of a sensor being activated or if you make changes to your settings. A notification is quickly sent from the cloud to you through your smart phone, tablet, or desktop.

### SENSORS



These tiny sensors can be placed on or in objects, on walls, doors + windows using double-sided reusable adhesive, or can be strung onto an item such as a keyring or book bag.

### THE APP



All of your sensors and notifications are set-up and maintained through our app for your smart phone, tablet or computer. You can control your sensors and receive notifications anywhere in the world that has Internet, cell/mobile coverage or WiFi.

## FUNCTIONALITY

### MOTION

Doors or windows are opened
Valuables are accessed
Medicine, liquor, or gun cabinets are opened
Sensitive or private items are moved
A refrigerator is opened
Washer, dryer or dishwasher stops or starts moving
Garage door is opened or closed
A purse or briefcase is moved
Computers are accessed
Filing cabinets or safes are tampered with



PERFECT FOR

Home • Office • Dormitory • Apartment

### TEMPERATURE

Doors or windows are left opened
Sudden drop or rise in temperature
Gradual decrease or increase in temperature
Pipes are beginning to freeze
Refrigerator door is left open
Heating or cooling system fails
Appliance is overheating or freezing
Food or medication reaches an undesirable temperature



PERFECT FOR

Conserving energy • Preventing damage Ensuring comfort for loved ones

## FUNCTIONALITY

### LIGHT

Light turning on or off in home or office

Dimming light from a power surge

When a light bulb goes out

Power outage or blown fuse

Motion activated lights go on or off

Change in sunlight

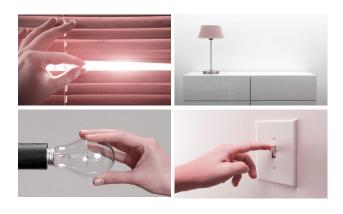
### MOISTURE

Humidity Condensation

### PROXIMITY

When a person, pet or object goes outside of a custom range

When a person, pet or object comes inside of a custom range



### PERFECT FOR

Conserving energy
Ensuring comfort for loved ones
Knowing when someone has entered
or left your property



#### PERFECT FOR

Helping to prevent mold

Protecting damage to equipment, documents, photographs, furniture, antiques + family heirlooms

Maintaining a healthy environment



#### PERFECT FOR

Knowing if pets leave the property

Keeping an eye on young children

Protecting computers, bikes, cars,
jewelry, and other valuables

## EXPANDABILITY

Each OVAL sensor comes with a removable shell which allows you to do even more with your sensors. This custom housing enables you to easily attach external OVAL sensors to your main sensor, greatly expanding its functionality.



The first external sensor available is a flood detector that can be positioned in hard to reach places such as a corner of a window or the seam of a pipe using the 3ft flexible cable. This flood detector can detect water quickly, alerting you to possible damage from rain, burst pipes, or leaking appliances - all while protecting your main OVAL sensor from any damage.

### FLOOD

Leaks from windows

Leaks from pipes

Leaks from toilets

Leaks from sinks

Leaks from washing machines

Leaks from dishwashers

Overflowing bathtub



#### PERFECT FOR

Conserving energy

Detecting water leaks early to prevent damage

## THE APP



Setup and control your sensors from anywhere in the world with the OVAL app. Add new sensors, choose what they monitor and when they monitor it, and select who receives notifications and what kind.



The simple menu quickly allows you to fine-tune your settings and make sure you capture exactly what you need.



View your notifications at any time and email a copy of selected notifications to yourself for archiving or tracking trends.



Make your sensor even smarter by recording a custom action that your sensor memorizes and then configures automatically - creating an accurate reading for your specific needs.



Easily add family members, friends and coworkers to receive notifications to help address possible issues in your home or office when you're unavailable.



Presets are included for the most commonly used assets. Simply select one and your sensor will configure automatically. You may also save your own presets for easy access.

# OVAL PRODUCTS AVAILABLE





#### INCLUDED

1 x OVAL Sensor

1 x OVAL Gateway

1 x Removable Sensor Housing

1 x Gateway Power Adapter

3 x Sensor Batteries

3 x Double-sided Adhesive Strips

Access to Mobile + Web App

200 x Notification Credits \*

Sensor requires 1 battery to operate
\* Email and push notifications are always free

\$150.00 USD





#### INCLUDED

1 x OVAL Sensor \*

1 x Removable Sensor Housing

3 x Sensor Batteries

3 x Double-sided Adhesive Strips

Access to Mobile + Web App

200 x Notification Credits \*\*

Sensor requires 1 battery to operate

\* Requires OVAL gateway (sold separately)

 $\ensuremath{^{\star\star}}$  Email and push notifications are always free

\$75.00 USD

OVAL FLOOD DETECTOR



#### **INCLUDED**

1 x External Flood Detector \*

50 x Notification Credits \*\*

\* Requires OVAL gateway (sold separately)

\*\* Email and push notifications are always free

\$40.00 USD

# IoT

We are at the cusp of the IoT revolution. There are 1.5 trillion objects that could benefit from being connected to the internet. Less than 1% are connected today. More than 5 million items will be connected every day in 2016. It is expected that 20 billion IoT devices will be installed by consumers by 2020.

## INTERNET OF THINGS ENDPOINT SPENDING BY CATEGORY (BILLIONS OF DOLLARS)

CATEGORY	2014	2015	2016	2020
Consumer	\$257B	\$416B	\$546B	\$1,534B
Business: Cross-Industry	\$115B	\$155B	\$201B	\$566B
Business: Vertical-Specific	\$567B	\$612B	\$667B	\$911B
GRAND TOTAL	\$939B	\$1,183B	\$1,414B	\$3,010B

Source: Gartner (November 2015)

## MARKETS - B2C



#### SMART SENSORS FOR THE REST OF US

Market research shows that most consumers are aware of smart sensor technology. However, many people feel that they are not tech savy enough to implement sensors into their home that require installation or integration with door locks, thermostats, light fixtures or appliances. OVAL solves these concerns by creating an entry level product that serves as an introduction to the IoT space. OVAL is created with the average consumer in mind who understands smart phones and can navigate simple apps, games and social media accounts.

#### HOMEOWNERS + RENTERS + BUSINESS OWNERS

Be aware of break-ins when doors or windows are opened. Conserve energy by knowing when lights are left on or a window is left open. Prevent water damage by being alerted of burst pipes, leaking windows or flooding in the basement. Protect equipment, inventory and sensitive files by monitoring if someone gains access or moves an item from its original location. Be notified if computer equipment overheats, pipes begin to freeze, or if another office or apartment has a problem that affects your location. Send alerts to neighbors, family members or business partners if you're out of town.

#### **FAMILIES**

Protect your purse, jewelry or liquor, medicine or gun cabinets from unauthorized access by children or strangers. Know when toddlers, pets or teens leave your home or may need assistance. Be notified if a fridge is left open, laundry is finished, someone has entered or left your home or even grabbed a cookie from a cookie jar. No matter how big or small, OVAL can notify you of many things that you're interested in knowing about.

#### **PROFESSIONALS**

Know if anyone attempts to access your laptop, files, or other personal/sensitive materials. When traveling, bring OVAL with you for use in hotel rooms and know if any of your property is tampered with, moved, or has left the location.

#### **ELDERLY**

OVAL is helpful for caregivers of the elderly, disabled and the infirm, especially those suffering from dementia, Alzheimer's, mental illness, and other serious health conditions. If loved ones are living alone or are left alone, they may open a window in the middle of winter, leave an appliance such as a stove or faucet on, or even wander away from their home. OVAL will notify neighbors or family members of these situations so they can take quick and compassionate action.

## MARKETS - B2B

#### OIL + GAS + MINING +/ UTILITIES

OVAL can develop custom solutions to track humidity, moisture and monitor supply levels.

#### INSURANCE

74%\* of insurance executives plan to implement IoT strategies in the near term. OVAL will be an inexpensive and effective solution to reduce expenditures related to floods, broken pipes and mold damage. \*SMA Research Survey

#### HOSPITALITY

Nearly 1/3\* of hotels already use self-locking doors. OVAL can help monitor room temperature, humidity, mold, bathroom floods and reduce costs. Metrics can be delivered to hotel management throughout the day and highlight rooms that require immediate attention. \*BI Intelligence 2015

#### **HEALTHCARE**

IoT is being rapidly adopted in this enormous sector. OVAL can help protect patient privacy by monitoring hard copy medical records. Solo practitioner mental health professionals, with limited budgets for IoT technology, can easily afford OVAL and monitor their patients' files. Nursing homes can monitor patients' rooms and ensure that windows are not inadvertently opened causing discomfort to patients. Nursing station managers can be alerted if patients leave their room at night. Illicit prescription drug use is becoming a more serious problem every year. OVAL can monitor prescription drug cabinets and alert parents when there is unauthorized access.

#### BUILDINGS

Smart buildings are on the rise. OVAL is a reasonable, efficient and cost-effective solution for office building property managers and individual companies.

#### LEGAL / ACCOUNTING / BUSINESS / GOVERNMENT

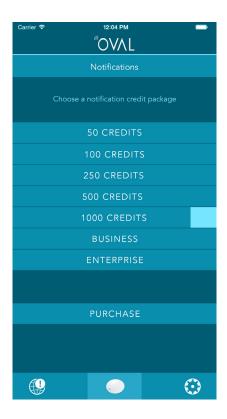
Breaching client confidentiality by unauthorized access to files poses enormous legal liabilities and ethical considerations for accountants and attorneys. Current security systems do not monitor individual files in offices or homes. Client confidentiality can be breached by employees, cleaning staff, and others. Business trade secrets can be exposed if files are not properly monitored in the office or home.

#### INFRASTRUCTURE

Municipalities are dramatically increasing IoT expenditures on an annual basis. Customized solutions can be developed for this important sector.

## MONETIZATION

#### DATA PACKAGES



OVAL can offer data packages allowing customers to purchase notification credits from within the app. These credits can be redeemed for all notification types or notifications that are generated from a third party service such as text messages and phone calls.

Data packages may also be sold on a subscription basis and larger solutions for small and large businesses can be made available as well.

#### SUBSCRIPTION MODEL



OVAL can be sold on a subscription basis through in-app purchases that unlocks the use of each parameter. Consumers can purchase each parameter with a one-time fee or by paying monthly. 24 hour free-trial periods could be offered for each parameter.

As new accessories are developed, access can be granted through inapp software purchases activated through a software update.

## MONETIZATION

#### CO-BRAND / ADVERTISING



Companies and organizations using OVAL where there is distribution to customers (rented or given away) may benefit from white labeling and targeted ads. We can customize the app to feature logos, deals and other information beneficial to their consumers.

Additionally, the software can be customized to feature presets and other features relating to the company or organization so they can easily monitor results, track trends, and engage with consumers in a meaningful way.

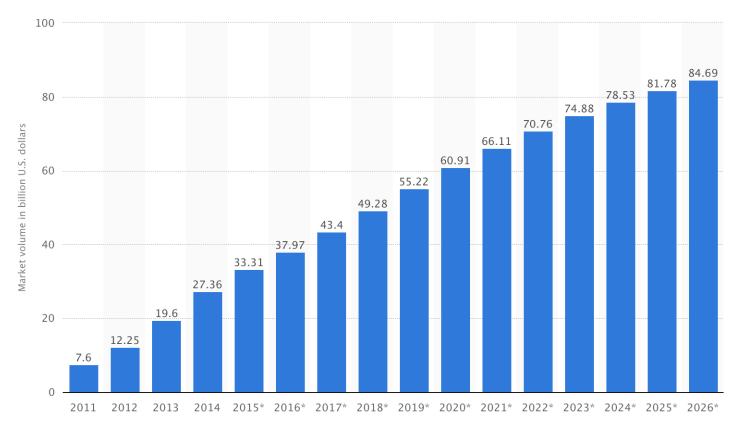
#### EXTERNAL SENSORS



Our sensor housing allows for the external connection of additional sensors, therefore consumers would not need to replace their OVAL kits. They can simply purchase the accessory and gain access through a software update. Sensors and the gateway also have large live print areas for company branding.

Each sensor creates a new vertical and the possibilities are as diverse as the sensors themselves. A keg detector, for example, can monitor the level of kegs, which in turn can be sold to bars and restaurants, or distributed for free with a branded app sponsored by Budweiser, for example. In addition to providing a valuable and needed service for bar owners, Budweiser now has the ability to periodically notify the bar owner of offers and other product info since the app is now installed on the bar owner's phone. A hyperlink to Budweiser's site and a direct e-mail/call to the Budweiser sales rep can be easily customized into the app.

## DATA



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OVAL tracks and monitors data for changes in motion, light, temperature, moisture, flood and proximity. Consumers and business can use this information internally to track trends and make necessary adjustments to increase profits, decrease extraneous spending, conserve energy, track inventory and understand consumer habits.

External businesses can also benefit from tracking these data trends. They can use this information to determine potential problems or needs in customers' homes and businesses and how their products or services may benefit them. For example: Insurance companies will promote IoT solutions for homeowners as a way to reduce losses and better understand risks.

OVAL can provide these analytics about how the sensors are being used and sort this information by gender / age / location and other information that may be relevant.

## CSR

Cause sponsorship is predicted to reach \$2.00 billion in 2016, a projected increase of 3.7% over 2015<sup>1</sup>. OVAL can partner with brands to deliver white-labeled solutions to customers that help with causes they care about. Or they can partner with an NGO to further grow their committment to CSR by directly engaging with their consumers in meaningful ways. "IEG Sponsorship Report



A pharmacy may distribute OVAL to customers who can use the sensors to monitor the temperature of their medication or be notified of unauthorized access to their medicine cabinets. Caregivers for the sick, elderly, or disabled - including those suffering from Alzheimer's or Dementia can be remotely notified should the temperature rise or fall drastically, a light bulb burns out, or if there's a change in motion or proximity.



A beer manufacturer can partner with an organization such as M.A.D.D. to distribute OVAL sensors to parents so they can monitor any unauthorized access to their liquor cabinets.



An insurance company can give OVAL to customers so they can be quickly notified and minimize damage from flooding due to weather, burst pipes, or failing appliances. The temperature sensor can also monitor if pipes begin to freeze of if there is a rise in temperature. This service will help consumers and the insurance company by tracking trends that may lead to changes in consumer behavior and lower the amount of insurance claims.

## COMPETITORS

OVAL uses a 2.4 GHz RF frequency which requires lower power and results in less interference than some of the competing sensor systems currently available. Additionally, because of the wide variety of sensing abilities and the opportunity to connect additional external sensors, OVAL can collect more data than our competitors.

#### **BLUETOOTH**

There are many Bluetooth sensors such as Tile, TrackR and Chipole. Many are simply short range "find tools". BT, as a wireless transmission standard, has a much shorter range and far less utility than our OVAL protocol. These BT products wirelessly connect directly to the smart phone instead of through the gateway to the cloud. Monitoring can only occur within the maximum 100 feet range of the smart phone instead of OVAL's worldwide coverage.

While BT products do have the advantage of requiring no gateway, we do not envision this one-time consumer investment in a gateway as a significant hurdle to gain significant market penetration given our compelling product strengths.

#### WIFI BASED SYSTEMS

Using WiFi as a transmission mode for portable products necessitates an increased power demand. There is a higher likelihood of interference with other wireless devices.

#### INDUSTRIAL SYSTEMS

Real time location systems (RTLS) and other industrial level monitoring systems have existed for years. The drawbacks are complexity of integration requiring professional installation and maintenance, and very high cost – often tens of thousands of dollars or more.

#### MONO SENSING SYSTEMS

There are various sensing systems available that monitor one type of parameter. As an example, there are standalone sensors that only detect motion compared to OVAL's flexible multi-sensing capabilities. We expect that most OVAL consumers will activate more than 1 sensing parameter for each sensor. The ability to combine sensing parameters greatly increases OVAL's use cases.

#### HOME INTEGRATION SENSING SYSTEMS

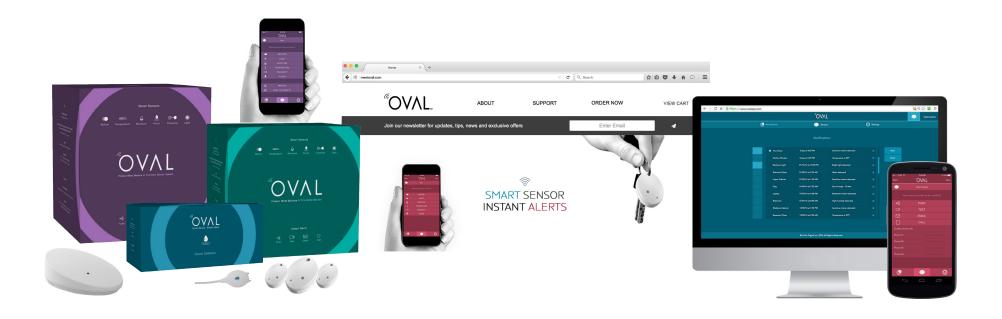
Products like NEST which propose to replace correctly functioning and installed \$50 programmable thermostats with \$250 WiFi thermostats are costly and complicated. Customers with limited DIY experience are expected to remove the old thermostat, possibly strip the wires, and correctly attach the wires to the new sensor. The NEST thermostat needs to be affixed to the wall and drywall needs to be patched. If WiFi fails, the NEST thermostat system fails. If the customer incorrectly installs the thermostat, professional assistance will likely be needed and the HVAC system will not be functioning until the issue is resolved.

Conversely, OVAL is an entry level, easy to use and install IoT system that does not replace a current and acceptable solution. It is a completely new and much needed IoT solution that does not require integration with existing home appliances or devices.

# BACKSTORY + TECHNOLOGY + BUILDING A BRAND

A few years ago, co-founder Rich Cosgrove's teenage son expressed concern over the increasing use of prescription drugs and alcohol among his peers. Given the growing epidemic of abuse of these substances and their potential to lead to more deadly drug use and addiction, Rich began to think of an unobtrusive way for parents to remotely monitor medicine and liquor cabinets from their smart phone. And the idea for OVAL was born.

After 3 years of developing and refining prototype after prototype, we now have a functional and easy to use IoT product that surpasses the original vision in both scope and performance. We tested our concept and learned with a crowdfunding campaign, built a talented passionate team, and created a professional and consumer-friendly brand. OVAL is ready for consumers, businesses, strategic, and development partners all over the world.















Click on above images for more info

### ADDITIONAL PRESS































## THE TEAM



RICH COSGROVE CO-FOUNDER + CEO

Rich has been an entrepreneur for over 20 years in the healthcare sector. He developed numerous patient education and compliance tools for more than 20 pharmaceutical companies. As a parent of a teen, he envisioned a technology product that would help reduce prescription drug and alcohol abuse among this vulnerable group. Rich holds a BBA/MBA from Pace University in New York.



MIKE HARRY CO-FOUNDER + COO + CMO

Mike has been an executive producer of live action and animated commercials, music videos, documentaries, films and new media projects for the last 15 years. He owns a production company, Concentrate LLC, and has produced campaigns for clients such as Johnson & Johnson, Chase, Diesel, MTV, HSBC, Victorinox, Chanel, Macquarie and many others. Mike holds a BFA from The School of Visual Arts in New York City.



K.K. CHAN VP ENGINEERING + PARTNER

KK has more than 10 years of successful electronic product design and development experience. During this time, he was responsible for home appliance design and development, RF circuit engineering, digital image processing, M2M control, GPS product design, mobile communications and networks, component sourcing, mass production, and continuous product improvement. KK has supervised a team of electronics and mechanical engineers tasked with new product development. He has also provided technical support for projects from such leading companies as Hasbro and Mattel. KK holds a BSc. in Electrical Engineering from University of Oklahoma and a MSc. in Electronic and Information Engineering/Business Mgt. from City University of Hong Kong.



PRANAY MATHUR VP TECHNOLOGY + PARTNER

Pranay has a proven track record of developing successful web and mobile solutions for respected international brands. He founded WeDig Techsolutions Ltd. in 2008 and has helped many clients including Red Bull North America, Hilton Hotels, and Sapient to launch successful web and mobile solutions. Pranay is well versed in technology selection, cloud based and real time applications, social media, and artificial data intelligence. He holds a Bachelor's degree in Marketing and Information Technology from Birla Institute of Technology, an MS in Information Technology, Web Development - Internet Programming, and a Master of Computer Applications, Internet Programming, E-Commerce from Punjab Technical University.



MOHIT GARG FIRMWARE ARCHITECT

Mohit is a system design engineer and a researcher with a wide range of skills and technical knowledge. He is specialized in both hardware and software design including ARM processors. Mohit has designed AFC gates, ticket readers, and RFID solutions for the Delhi Metro Rail Corporation. He has also worked with Omega Electronics and helped deploy more than 20 products, working with very high bandwidth networking chips (10GE/40GE), and combining them in new large high-density designs. He is also a research assistant at the Indian Institute of Technology. In 2012, Mohit received his Bachelor of Technology in Computer Science from Rajasthan Technical University.

## CURRENT STATE OF PRODUCTION

#### **OVAL Hardware**

Prototype complete - all parameters working well.

#### **OVAL Firmware**

95% complete - implementing OTA (over the air updating) + firmware will need to be fine-tuned after completion of sensor housing mold.

#### **OVAL Software**

Web app, iOS, + Android complete and functional - design revisions underway as well as enhancements to user experience.

#### **OVAL Gateway Molds**

Stainless steel, high capacity molds complete - ready for manufacturing.

#### **OVAL Sensor Molds**

Design complete and SLA prints approved - mold building began 03.18.16 (expected date of completion 04.30.16). OVAL sensor mold more complex than gateway tool – 11 plastic parts and 6 metal parts are required for sensor assembly.

#### **OVAL Flood Detector**

Design complete – mold building began 03.18.16 (expected date of completion 04.30.16).

### **OVAL Packaging**

Design complete .

### **OVAL Terms of Service + Privacy Policy**

80% complete - revisions underway in consultation with our attorney.

### **OVAL Copyright + Trademark**

In progress.

#### **OYAL Website**

Live @ www.meetoval.com - support section and tutorial videos in progress.

#### FCC / CE Certification

Will submit with production gateway/sensor housing after completion of sensor tool.

#### Initial Production Run - Est MAY 2016

500 units; 300 sent to crowdfunding backers; 200 samples for promotion, press + distributors.

## FUTURE OF OVAL

After 3 years, we have found that our OVAL development process is far from linear, but rather creatively messy as new applications and marketing ideas unexpectedly and positively evolve. Our core team works extremely well together, which bodes well for a fruitful collaboration. We all have extensive business experience with differentiating, complementary skill sets. We passionately believe that OVAL can make a meaningful difference in people's lives – and have faith that there is significant economic value that can be realized by our distribution partners and end users. In addition to our flagship OVAL sensor product, we plan to continually evolve and expand our OVAL technology through software and hardware enhancements.

#### **OVAL "LITE" EDITIONS**

We can modify our current hardware to maximize battery power and expand the functionality of one particular sensor. Because fewer sensor components are required, product manufacturing costs would be decreased. A customized solution could be offered to home insurance companies with these specific sensing parameters. For example: OVAL: MOTION; OVAL: MOISTURE; etc.

#### OVAL NANO

A super small version of our OVAL sensor that can be attached to smartphones, wallets, glasses and other small, valuable goods that we carry with us on a daily basis. Whenever you forget these objects or they got stolen, the user will be notified.

#### **MOBILE GATEWAY**

A rechargeable battery powered gateway version that allows the user to monitor and track its sensors outside their stationary home network. We are also exploring integrating our gateway into the actual sensor or as a standalone device. We are having discussions to utilize a proprietary wireless communications network so that our gateway is completely portable.

#### **EXPANDABILITY - EXTERNAL SENSORS**

Short term, we plan new external sensors which can be conveniently plugged into our current OVAL sensor. Because these sensors rely on many of the components of the main OVAL sensor, our cost of manufacturing will be low and yield impressive profit margins. New sensors include carbon monoxide, medical applications, smoke, external temperature/humidity, and oil or other supply level detectors.

For industrial purposes, our app can be completely customized and even integrated into current enterprise systems. Descriptive statistics reports can be created so that enterprise customers have the necessary data real time, both in the aggregate and individualized, and in various formats such as graphical summaries and tabular formats. We also welcome our customers' and distribution partners' feedback. Based on need and feasibility, we will develop new IoT solutions that can be easily integrated into our OVAL technology.



Thank You!

### For inquires please contact

Rich Cosgrove rich@meetoval.com
201.825.7676 ext. 201

Mike Harry
mike@meetoval.com
917.532.4515

www.meetoval.com

### **FCC STATEMENT:**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

**Warning:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

### **RF warning statement:**

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.