

# Smarter, More Sustainable Agriculture with Zyter



## From the Internet of Things (IoT) to the Intelligence of Things

Zyter Smart Agriculture enables you to unlock the full potential of connected IoT devices across your farming ecosystem so you can:

- Improve Crop Yield with Precision
  Agriculture Practices Simplify and
  automate crop field inspections for
  soil moisture, nutrients, solar radiation
  levels, precipitation, wind speed,
  temperature, air quality, and more.
  Identify unfavorable conditions and
  take action to correct them faster to
  ensure maximum crop yield.
- Make Smarter Decisions on Crop Management – Gain actionable insights using real-time data streams from IoT devices, comprehensive dashboards, alerts and notifications, and Al-generated prescriptive actions in Zyter Smart Agriculture to support crop management improvements.
- Enhance Farm Efficiency Reduce the amount of manual work involved in soil monitoring and testing by automating standard practices for greater efficiency and data accuracy. Boost the bottom line by doing more with fewer farm labor resources.

Farming is an art and science passed down from generations. Today's next-generation farmers are still challenged to grow healthy crops for maximum yield like their grandfathers did, but with a new twist. To stay profitable and viable, U.S. farmers will need to increase sustainable food production over the coming decades to alleviate food insecurity for a growing global population – and it will take a digital transformation of the farm with smart technology solutions to make them successful.

Zyter Smart Agriculture™ uses Internet of Things (IoT) technologies and artificial intelligence (AI) to provide unprecedented data volumes on the health of your crops and insights into what actions to take to ensure optimal yield. This digital-age approach to precision agriculture makes it easier for farmers to monitor and manage multiple factors affecting crops despite a shrinking labor force of available farm workers. In fact, your next new farmhand could be an Al-enabled drone with a high resolution camera inspecting your fields.

Zyter Smart Agriculture is a part of the Zyter SmartSpaces™ IoT platform. Trusted by Qualcomm® to be the foundation of its Smart Cities Accelerator Program, the Zyter SmartSpaces platform breaks down silos of information by integrating and consolidating data from IoT devices and applications you already have into one seamless interface.



Get a consolidated, real-time view of all factors that could potentially affect crop yield so you can make more informed decisions faster.



Receive instant alerts if any important parameters that are being monitored drift out of pre-set ranges.

## Take Soil Readings. Inspect the Fields. Make Decisions. Anywhere. Anytime.

Gathering data from a network of connected IoT sensors and devices placed in the ground as well as in and on other places across the farm, Zyter Smart Agriculture provides complete visibility of the status of soil moisture and nutrients, and other measurements on an intuitive dashboard. Zyter Smart Agriculture uses AI to translate this data to analytics and suggestions to help you, or agronomists working with you, make more informed and intelligent decisions regarding crop irrigation, adding or changing nutrients, crop dusting, and more. Plus, you can take the Zyter Smart Agriculture mobile app on your device with you anywhere you go to ensure that you receive instant alerts and notifications on possible adverse conditions affecting your crops.

The IoT and AI technologies in Zyter Smart Agriculture help you understand the health of your crops on a single, intuitive dashboard in the following ways:

- Crop Yield Management with IoT Sensors Zyter Smart Agriculture takes the guesswork out of soil monitoring. Multiple IoT sensors and devices connected to the Zyter IoT platform pull in a complete range of soil and atmospheric data and make it available in a graphical interface that is easy to use and understand. Simply click on a crop location to get a virtual view of current conditions, plus notifications and alerts of measurements that are above or below normal so you can take corrective action. As a result, you'll be able to manage your crops for the expected yield with less manual work and more accuracy than ever before. Zyter Smart Agriculture can also provide historical data of conditions and events, so you always have the knowledge at hand to replicate the actions that maximized yield.
- Al-based Actionable Insights The Al component of Zyter Smart Agriculture analyzes the streams of IoT data over time to give farmers and agronomists alike suggestions and estimations on how to best ensure optimized yield. You can use these actionable insights to make informed decisions on crop location, nutrients, irrigation and pest control, for example. Or collaborate more effectively with agronomists in analyzing what actions will work best to achieve your goals for precision agriculture.
- **Drone-based Inspections with AI** Optimize time and resources for crop inspections with automated drones equipped with AI-driven technology. Just like walking through the field yourself, the drone inspects the crops using AI imagery that "learns" over time what the crop should look like and what conditions are ideal. This data is fed into Zyter Smart Agriculture and analyzed to provide additional actionable insights for optimal crop management.

#### Zyter Deploys Smart Agriculture for Rural Cloud Initiative

Zyter Smart Agriculture has made precision agriculture a reality as a member of The Rural Cloud Initiative (RCI), a technology consortium focused on transforming rural communities with smart technologies. First deployed in a "live lab" at a working farm in North Dakota, the Zyter IoT platform supports over 250 different IoT and AI technologies to automate processes for sustainable food production and increasing yields of soybeans across 12 acres.



### **About Zyter**

Zyter delivers a wide range of Internet of Things (IoT) solutions spanning buildings, stadiums, campuses, and even cities. The Zyter SmartSpaces platform supports solutions for multiple markets including healthcare, education, logistics, retail, travel, and construction. By integrating and consolidating data from IoT devices and applications, organizations can gain new insights to improve efficiencies while providing end-users with an engaging digital experience. In 2021, Zyter won more than 37 global awards for its IoT products including Best Technology and Company Innovation of the Year. Founded in 2017, the privately-held company is based in Rockville, Md. For more information, please visit **www.zyter.com/iot**.

#### For More Information

The next-generation smart farm is here today and Zyter makes it easy to deploy. Learn how Zyter Smart Agriculture can transform farming to sustainable, precision agriculture resulting in maximized yields. To arrange a product demonstration, please contact +1 (301) 355 7760, sales@zyter.com or visit www.zyter.com/SmartAgriculture.

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