

# **Global Yield Monitoring Devices Market Size study & Forecast, by Technology, Application, End Use, Component, and Regional Forecasts 2025-2035**

<https://marketpublishers.com/r/GAE57C3ABE13EN.html>

Date: June 2025

Pages: 285

Price: US\$ 3,218.00 (Single User License)

ID: GAE57C3ABE13EN

## **Abstracts**

Global Yield Monitoring Devices Market is valued approximately at USD 2.3 billion in 2024 and is anticipated to grow with a CAGR of more than 7.41% over the forecast period 2025-2035. Yield monitoring devices have emerged as the nerve center of precision agriculture, enabling real-time data-driven decisions that enhance productivity and resource management. These devices help track crop performance, soil health, moisture content, and nutrient levels with pinpoint accuracy, empowering farmers to tailor their operations for maximum yield and sustainability. With climate variability and food security concerns gaining traction, the integration of sensor technologies, AI-based analytics, and GPS-based positioning in farming operations is not merely an upgrade—it's a necessity for the future of agriculture.

The growing pressure on global food supply chains, coupled with the imperative to optimize land and input usage, is fueling the widespread adoption of yield monitoring systems. Electromechanical, optical, acoustic, and GPS-enabled sensors—alongside integrated data loggers and analytics platforms—are transforming conventional farming into a digital-first ecosystem. According to recent studies, digitally optimized agricultural practices have demonstrated yield improvements by as much as 15–20%, while simultaneously reducing water and fertilizer use. However, despite the clear advantages, adoption in developing economies remains hindered by infrastructural constraints, high capital costs, and a lack of digital literacy among end users. Still, ongoing advancements in IoT-based monitoring, mobile connectivity in rural areas, and government subsidies are steadily mitigating these barriers.

Regionally, North America is poised to dominate the market due to its mature agricultural technology landscape, substantial investments in agri-tech R&D, and

widespread deployment of precision farming techniques across the United States and Canada. Europe follows closely, propelled by regulatory support for sustainable agriculture and initiatives such as the Common Agricultural Policy (CAP). Asia Pacific is forecasted to be the fastest-growing region over the coming decade, with countries like India, China, and Australia leveraging agri-digitalization to feed their expanding populations. Enhanced rural broadband connectivity, coupled with supportive government reforms, is expected to elevate the adoption of yield monitoring technologies in these high-growth markets.

Major market player included in this report are:

John Deere

Ag Leader Technology

CNH Industrial N.V.

Raven Industries

Trimble Inc.

Climate LLC (Bayer Crop Science)

Topcon Positioning Systems

AGCO Corporation

CropX Inc.

Precision Planting LLC

TeeJet Technologies

Farmers Edge Inc.

SST Development Group, Inc.

Sentera

Taranis

## Global Yield Monitoring Devices Market Report Scope:

Historical Data – 2023, 2024

Base Year for Estimation – 2024

Forecast period – 2025-2035

Report Coverage – Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Regional Scope – North America; Europe; Asia Pacific; Latin America; Middle East & Africa

Customization Scope – Free report customization (equivalent up to 8 analysts' working hours) with purchase. Addition or alteration to country, regional & segment scope\*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values for the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within the countries involved in the study. The report also provides detailed information about crucial aspects, such as driving factors and challenges, which will define the future growth of the market. Additionally, it incorporates potential opportunities in micro-markets for stakeholders to invest, along with a detailed analysis of the competitive landscape and product offerings of key players. The detailed segments and sub-segments of the market are explained below:

By Technology:

Electromechanical Sensors

Optical Sensors

Acoustic Sensors

GPS-Based Monitoring

Data Analytics Software

By Application:

Crop Yield Monitoring

Soil Moisture Monitoring

Pest and Disease Monitoring

Nutrient Monitoring

By End Use:

Agriculture

Forestry

Horticulture

By Component:

Sensors

Data Loggers

Software

Display Devices

By Region:

## North America

U.S.

Canada

## Europe

UK

Germany

France

Spain

Italy

Rest of Europe

## Asia Pacific

China

India

Japan

Australia

South Korea

Rest of Asia Pacific

## Latin America

Brazil

Mexico

Middle East & Africa

UAE

Saudi Arabia

South Africa

Rest of Middle East & Africa

Key Takeaways:

Market Estimates & Forecast for 10 years from 2025 to 2035.

Annualized revenues and regional level analysis for each market segment.

Detailed analysis of geographical landscape with Country level analysis of major regions.

Competitive landscape with information on major players in the market.

Analysis of key business strategies and recommendations on future market approach.

Analysis of competitive structure of the market.

Demand side and supply side analysis of the market.

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