

# **DIGITAL SOLUTIONS**

TECHNOLOGICAL INNOVATION IN THE SERVICE OF PRODUCTIVITY

KATTER A

Passion for Innovation.





aged from a remote location.

# **LANDINI DIGITAL SOLUTIONS HELP YOU CULTIVATE YOUR FUTURE**

Technological innovation improves working conditions, increases productivity and protects the environment. Following this philosophy, the Argo Tactors Group has prepared its tractors for the most cutting-edge digital and telematic technologies. This will help farmers manage their machinery fleets and their farms more efficiently and remotely, wherever they are. Landini Digital Solutions offers a range of advanced functionalities:

- **Telemetry and Remote Diagnostics**
- Precision Farming
- Farm Management
- Digital Services
- Cloud Data

Landini Digital Solutions give you more performance, more efficiency and more profitability while improving simplicity, safety and comfort.



**PRECISION FARMING:** trol of implements, including in automatic mode.



FARM MANAGEMENT: ment.



**DIGITAL SERVICES:** 



**CLOUD DATA:** all services.



### **TELEMETRY AND REMOTE DIAGNOSTICS:** Thanks to the Fleet & Remote Diagnostics Management system, telemetry monitors your fleet analysing tractor performance data, while remote diagnostics enables tractor parameters to be monitored and man-

The Precision Steering Management satellite guidance system improves working accuracy and efficiency; the ISObus system ensures efficient con-

Landini Farm manages prescription maps and simplifies farm manage-

The My Landini app provides easy access to the Landini world.

The Agrirouter cloud platform allows integrated communication among



# **FLEET & REMOTE DIAGNOSTICS MANAGEMENT: PROFIT ASSURED**

Landini, a brand name that stands worldwide for passion and innovation, equips all its tractors with remote management and diagnostic capabilities. The Landini Fleet & Remote Diagnostics Management system helps farmers make informed data-driven decisions that will reduce their operating costs while increasing the efficiency and productivity of their farms. The system, which can be easily accessed from a computer or a mobile device, allows farmers to remotely monitor the activity of each tractor and analyse the data of their entire fleet of vehicles. This advanced solution is based upon four key elements:

1. Real-time fleet monitoring 2. Data analysis 3. Scheduled maintenance and remote diagnostics 4. Record of activities

Landini is fully committed to addressing the needs of modern agriculture with concrete and effective solutions. The Landini Fleet & Remote Diagnostics Management system helps farmers manage their farms more efficiently by favouring the most appropriate choices in order to maintain their tractors in good working order, optimise their work and increase their business profitability.

### **REAL-TIME FLEET MONITORING**

The system displays at all times the exact location of each tractor in a fleet and, using the Geofencing technology, notifies whenever a vehicle enters or exits a specified zone. It also measures the efficiency of each tractor by checking parameters like speed, engine hours and RPMs, fuel and AdBlue® levels, average consumptions and work progress.

### **DATA ANALYSIS**

The data coming from the tractors allow the system to measure the productivity of each vehicle in the fleet and the farm's operating profit. These data are essential to monitor and reduce costs, make predictions, organise work plans and take informed decisions.

#### **SCHEDULED MAINTENANCE AND REMOTE DIAGNOSTICS**

The tractor fleet is managed in a simple and fast manner. In case of failure, our aftersales service intervenes remotely in real time in order to adopt the most appropriate solutions and to improve the tractor's performance, thereby reducing downtime and extending the equipment's life.



### **RECORD OF ACTIVITIES**

This function delimits the work areas and stores the data of the activities performed. This allows the user to better organise the work, increase efficiency and productivity and maximise profitability.



# LANDINI FARM TECHNOLOGY MAKES FARMING MORE PRODUCTIVE

Landini improves the efficiency of your farming operations. But not only this: Landini Farm connects your tractor to an intelligent and intuitive farm management system. This brings farmers a number of benefits in terms of time saving, work simplification and enhanced performance.

## 360-DEGREE MANAGEMENT SOLUTIONS FOR YOUR FARM

**Landini Farm** supports more than 400 different crops and allows virtually all tasks on the farm to be accomplished, including crop management, tracking and planning of field activities, advice on crop protection and irrigation practices, creation and exchange of prescription maps with monitoring of costs and sustainability, export of documents.

#### **CONNECTED TO YOUR LANDINI**

By connecting your Landini to the **Landini Farm** app, you can view performance levels and reports on the farming activities carried out in the fields. In addition, you can display prescription maps, A/B lines, boundaries and obstacles.



### **ALWAYS AT YOUR FINGERTIPS**

Whether in the field or on the farm, Landini is always at your side, thanks to the **Landini Farm** app for smartphone and tablet. And if you want to run your business from your computer, you may access the web version synchronised with the mobile devices.

#### SIMPLE AND INTUITIVE

**Landini Farm** is designed to be clear and user-friendly. A support chat answers questions about the use of the app.





### **START PACK HELPS YOU MANAGE YOUR FARM MORE EFFICIENTLY**

Start Pack provides 14 functions that will help you create and export the register of plant protection treatments in a simple and fast manner. Start Pack includes the following functions:

**Map:** This function displays on a single screen all the activities of the farm. Thanks to the filters, you can easily view the disposition of the crops in the fields, the parcels already sown and those still waiting to be planted.

Fields: This function allows you to mark the boundaries of your fields, compile the register of activities, manage crop rotations, export accurate statistics, and speed up business management.

Activities: This function allows you to manually register the activities in the field and to take note of details such as the machinery used and the doses applied. The system provides all the information to be exported into the register of plant protection treatments.

Loads: Thanks to the digital registration of transports, you can calculate the production of your fields, measure the quality of your crops and keep a record of deliveries.

Silos: This function allows recording of materials loaded and unloaded from tower and bunker silos.

Warehouse: From here you can access your warehouse inventory, either in the field or remotely. At the end of the farm season, the system will provide the balance of all your material movements that will show when and how each resource has been used.

Machinery: With this function you can associate each machine to a specific task in the field, check the activities performed, record maintenance activities in order to monitor costs and interventions, and digitalise instructions manuals.

Products: This function allows you to search for approved plant protection products. You can also track the products and materials used on your farm such as fertilisers, seeds or spare parts.

Data and Doses: This function displays labels, restricted-entry intervals and recommended doses of plant protection products. It also speeds up registration of pest management interventions. Alerts: With this function you can use data to create emails, SMS and notifications with customised messages. You can create alerts for products running out of stock, maintenance reminders, critical activities, and more.

Shared Access: Here you can share with your collaborators access to the app and to data of their interest. This simplifies work and makes field operations easier.

Satellite Lite: This function displays the latest satellite map of each of your fields. Images are shot every five days, allowing you to detect in a timely manner any anomalies or variations in the crop growth based on the NDVI vegetation index.

Notes: Here you can record reminders, save important photos and share georeferenced information with your collaborators.

Export of Data: This function exports data and information in the most used formats for administrative activities, for purposes related to the CAP (Common Agricultural Policy) and for tender notices.









## **PRO PACK ENHANCES EFFICIENCY AND PRODUCTIVITY**

PRO Pack provides all the functionalities of Start Pack for efficient management of your farm. In addition, this platform offers three functions designed to simplify and enhance precision farming, prescription maps and tractor connectivity:

Satellite Pro: This function provides multispectral images of every parcel based on the analysis of eight indexes. Satellite photos taken every five days and access to the photographic records of the last 12 months will allow a comparison and assessment of modifications occurred over time, enabling timely detection of critical situations such as a low vegetation index or a reduced leaf coverage.

Prescription Maps: Satellite images allow the creation of maps for variable-rate applications by associating the ideal quantity of fertiliser to each portion of the field. By sending these maps to your tractor you will optimise resources and increase your profit margins while reducing wastes and environmental impact. Connection to Tractor: This function displays the reports of the tasks performed, providing details on efficiency and times and modes of operation. It further allows the automatic compilation of the register of activities, which improves the quality of the recorded information. This function also allows reporting, reception and transmission of maps, A/B lines, boundaries and obstacles.

## **EXTENDED FUNCTIONALITIES FOR 360-DEGREE MANAGEMENT OF YOUR FARM**

Pack platforms, nine advanced functional- economic sustainability of their farms. ities of Landini Farm can be accessed to **Agro-Meteo:** This option gives access allow users to: plan the activities of the to reliable weather forecasts with specific fleet, install sensors in the fields, receive information for farming activities such as, agronomic advice on crop protection and for example, the ideal irrigation timing to irrigation, manage the farm, and monitor avoid spray drift or the optimum sowing the sustainability of the farming activities. Management: This function simplifies Sensors: Landini Farm sensors allow diafarm management by comparing crop grams and charts with the measurements yields, farming techniques, crop varieties and parcels. Recorded activities will enable farmers to calculate costs, incomes humidity sensors, leaf moisture sensors, Irrigating only when needed will reduce

Administration

period to maximise germination potential. done to be viewed on the app. Options of crop stress, and receive advice on the available include: meteo stations, soil

In addition to the Start Pack and PRO and profits, allowing them to improve the and insect monitoring traps. Each sensor is independent thanks to solar panels and to the GSM connection. The data collected are also used by other functions of the app such as Alerts, Pest Management and Irrigation, to provide agronomic advice. **Irrigation:** The sensors positioned in the field will allow you to: measure the water status of the soil and compare it with the crop requirements, display the level quantity and timing of the next irrigation.

crop stress and will save time, water and resources while boosting productivity. **Pest management:** The sensors installed in the field will send you pest management warnings based on reliable data. By identifying the ideal timing to enter the field, you will prevent the development of diseases with targeted treatments, thereby protecting your crops and saving resources. The module shows the six-day forecast of the risk of appearance of the targeted fungal disease and the residual protection since the last application.

**Operational Management:** This function displays the activities of both your fleet and your collaborators, including in various farms. Operators will have access to a simple and intuitive screen page that displays the tasks to be performed during the day with details on machinery and materials required. Planning and Budget: This function

allows farmers to plan field tasks, estimate the costs and evaluate the cost effectiveness of each selectable option. In case of repetitive tasks, multiple activities can be planned.



Advanced Report Management: This option allows the export of constantly updated documents for organic farming and for the GlobalGAP certification of safe and sustainable agriculture. Multicompany: This function allows you to link more Landini Farm accounts in order to manage more companies from a single profile. Farming contractors working for more customers may share their accounts among various farms.



## **ISOBUS & ISOBUS GREEN MAKE YOUR WORK SIMPLE AND EFFICIENT**

every implement.

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# **PRECISION STEERING** MANAGEMENT **FOR PRECISION PERFORMANCE**

Precision farming has been in existence ever since man started to cultivate land. Today, thanks to technological development, precision farming is carried out with cutting-edge tools that improve efficiency and increase productivity.

Landini uses the innovative PSM (Precision Steering Management) system, a set of integrated devices for satellite-assisted guidance that can be managed from the tractor cab via a simple touch screen, on which the tasks to be performed in the field can be easily imported. Thanks to the precise automated steering control, the tractor only deviates 2 cm from the desired route, eliminating overlaps. This helps operators work with more speed and accuracy and reduces operating costs and environmental impact while raising efficiency and productivity in the field.

# **PRECISION STEERING MANAGEMENT & ISOBUS BRING BENEFITS TO THE FIELD**

The *Precision Steering Management* and the ISObus the automatic steering allows a deviation of only 2 cm system are innovative technologies adopted by Landini from the set route. to increase efficiency and productivity while improving Reducing the travelled distance in the field reduces comfort and safety: tractor and implement wear and tear and saves fuel.

of accuracy, including in automatic mode.

All implement activities are managed with a high level The use of variable-rate applications based on prescription maps generated by the Landini Farm platform Difficult manoeuvres are simplified, thereby reducing eliminates skips and overlaps, minimizing product waste. operator fatigue. Variable-rate technology reduces overuse of water, seed use When the driver must attend to driving and simulta- by 10%, fertilizer use by 16% and herbicide use by up to 60%. neously control the implements, the PSM satellite-based **Chemical residues are also reduced with significant** guidance system will allow them to fully concentrate on benefits for the environment.

the task at hand.

with maximum accuracy. Thanks to the RTK protocols,



In 2015, Argo Tractors received the AEF ISObus certification. The ISObus system is the standard protocol through which the on-board computer communicates with the tractor and implements. The automatic control of ISObus-compatible implements allows variable-rate applications to be delivered through prescription maps generated by Landini Farm. All ISObus-compatible implements are managed via a DSM 12" touch screen monitor to improve operating efficiency and productivity.

Landini is a leading participant in the innovative ISObus Green project. This project allows farmers to retrofit their mechanical implements with the technology so as to connect them to the tractor's ISObus system. This solution maximises the efficiency of

■ Reports and pre-setting operations are simpler and can The satellite guidance system tracks field operations be done autonomously without recurse to skilled personnel.



# ARGO TRACTORS FLEET ROUTER MANAGEMENT SIMPLIFIES YOUR WORK

The new digital technologies have rapidly multiplied the sources and destinations of data. Today, it is paramount for both small farmers and large agricultural businesses to enable different systems to communicate with each other. For this reason, on March 30, 2023, Argo Tractors has become an **Agrirouter** certified partner with the account *Argo Tractors Fleet Router Management*. **Agrirouter** is a universal data exchange cloud platform that allows the interchange of information between machinery, equipment and software of different manufacturers. **Agrirouter** links different sources and platforms, simplifying the operating processes and ensuring data confidentiality. The operator keeps everything under control with a single system. By connecting the tractor to the implements, including those from different manufacturers, and to the Landini Farm platform, a simple and efficient integrated management of both machinery and farm is achieved.

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## MY LANDINI APP, WELCOME TO LANDINI'S HOME

The intuitive My Landini app offers the user a 360-degree immersive experience through our Digital Solutions. The My Landini app gives you easy access to all Landini digital services, allowing you to stay connected with the company through news, insights, offers and customised information. With My Landini you can:
Register your Landini tractor fleet and access the scheduled maintenance program.
Access the Landini Fleet & Remote Diagnostics Management system.
Access the Landini Farm platform.
Stay updated with the very latest news and events from the Landini world.
Stay informed on promotions and offers of tractors, original spare parts and services.

Stay updated with new produce Landini is always at your side. world at your fingertips, so you efficient and productive.



Stay updated with new products, promotions and events from the nearest dealer.

Landini is always at your side. With the **My Landini** app you have the whole Landini world at your fingertips, so you stay informed and optimise your work making it more



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