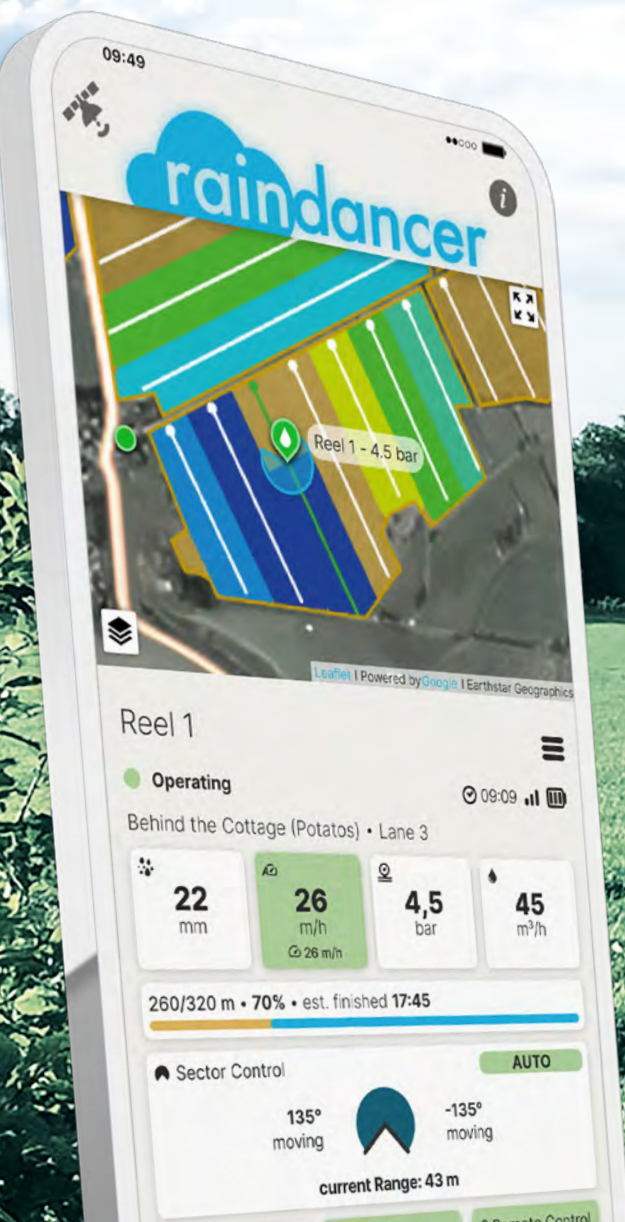




raindancer

smart irrigation management



let me introduce



raindancer.com/what-is-that





From a quirky idea to a smart solution

When there is no rain, stress begins, and not just for the plants. In order to save the crops and secure yields, the irrigation system has to work flawlessly.

Interruptions in the process can have expensive consequences. The workload during the irrigation season is now suddenly even heavier, the days even longer, and in the long run this is very stressful and exhausting.

We stepped up to make this tough job a little easier.

At a time where smartphones were still the domain of "nerds", we started out with the idea of a smart solution for irrigation. At first, many people smiled at it as a "gimmick", but the solution quickly struck a chord with farmers and became more and more popular.

With each new member of the Raindancer family, we were encouraged in our mission. Raindancer users were bursting with ideas to make the solution even better.

The enthusiasm and new input have been the fuel for the exciting journey in which Raindancer has been, and still is, constantly evolving with our clients in line with their needs.

It is great to see how these ideas have become reality and Raindancer has grown into an essential tool for our farmers.

This would not have been possible without you, dear Raindancer family!

Raindancer® - smart irrigation management

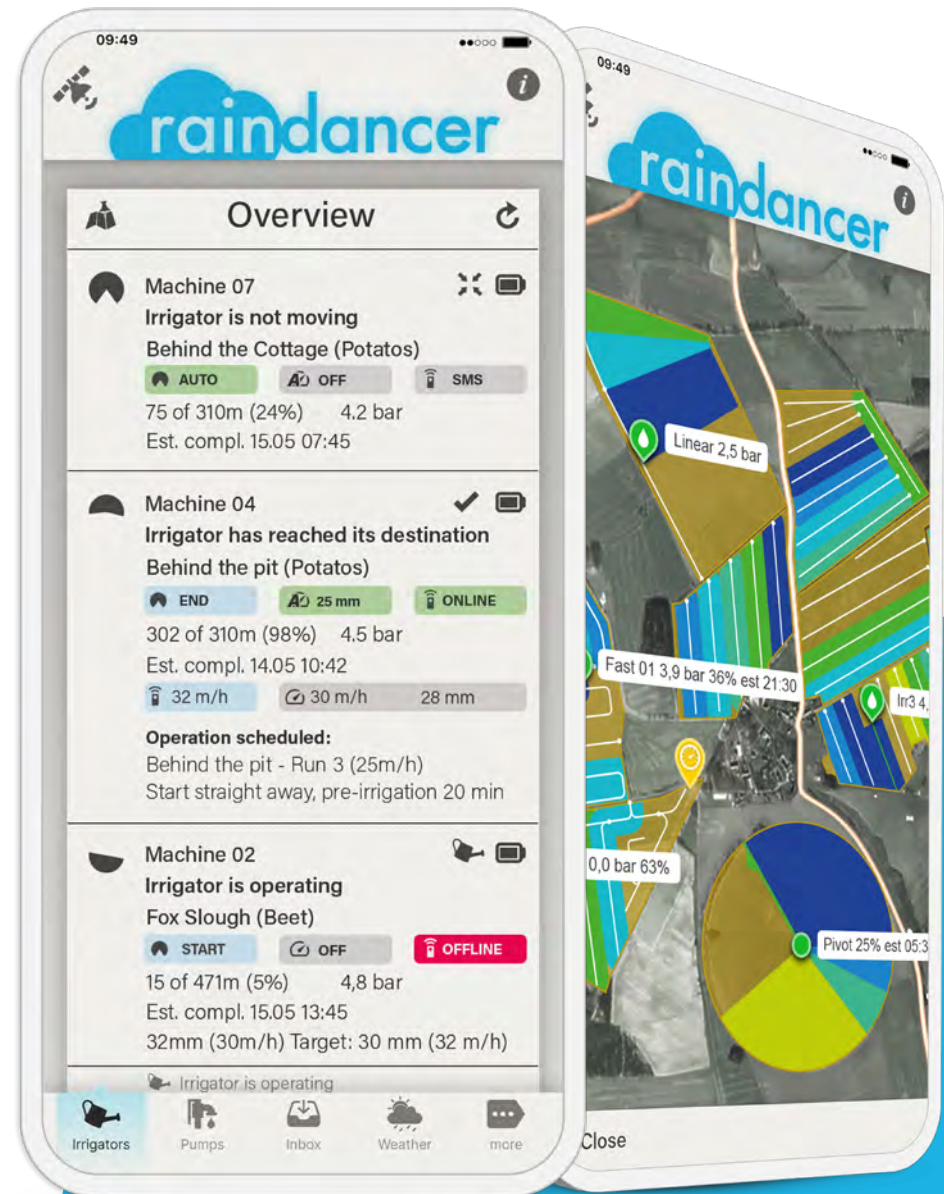
With raindancer GPS you are able to monitor and control the irrigation from your smartphone or PC.

Get **the right amount of water to the right place in the field** and save time and energy.

The use of raindancer is very simple and compatible **with all types of irrigation machines.**

What is it all about?

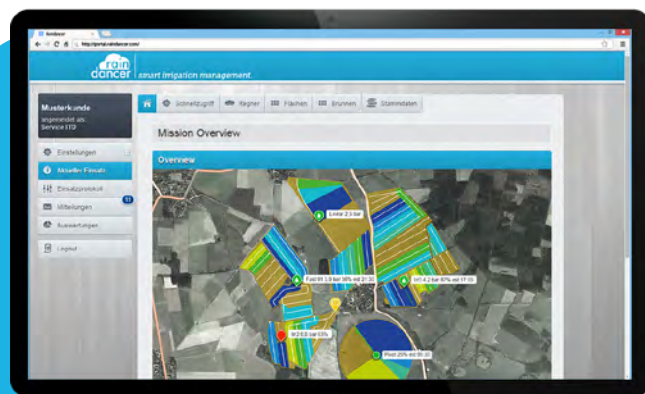
- The entire irrigation at a glance
- Alarm in case of malfunction
- Avoid needless visits
- Save water & energy
- Irrigation rate recommendation
- Variable Rate Irrigation
- Even water distribution
- Enhanced pump and machine control
- Assistance with dispatching
- Automatic documentation and reports





Raindancer GPS Module + Pressure Sensor

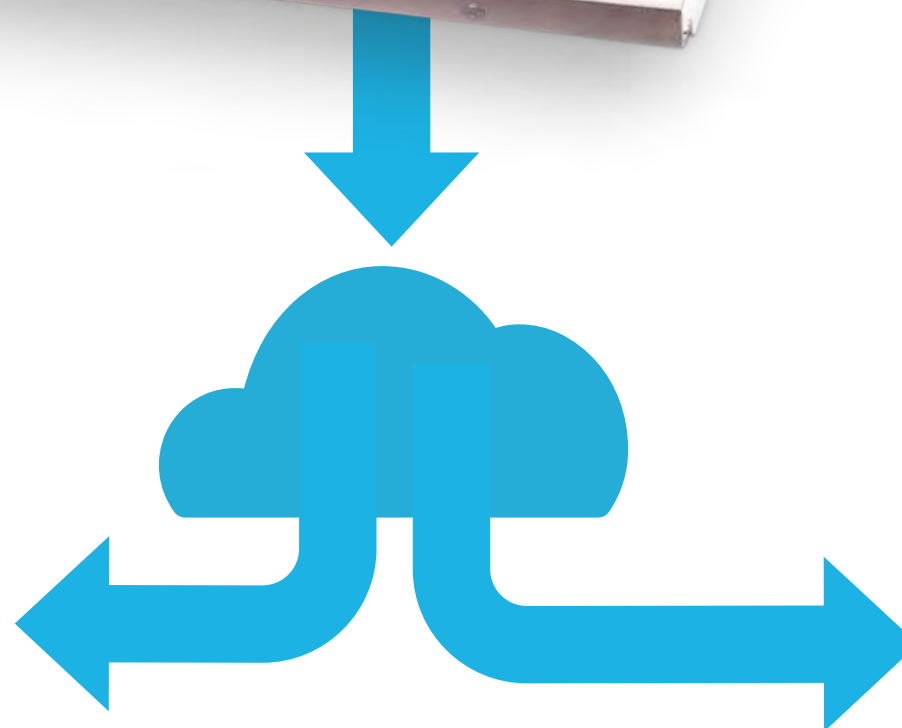
- Continuous data transmission
- Pressure, Position, Tilt



Edit Master Data

Web-Browser (Edge, Firefox, Chrome)

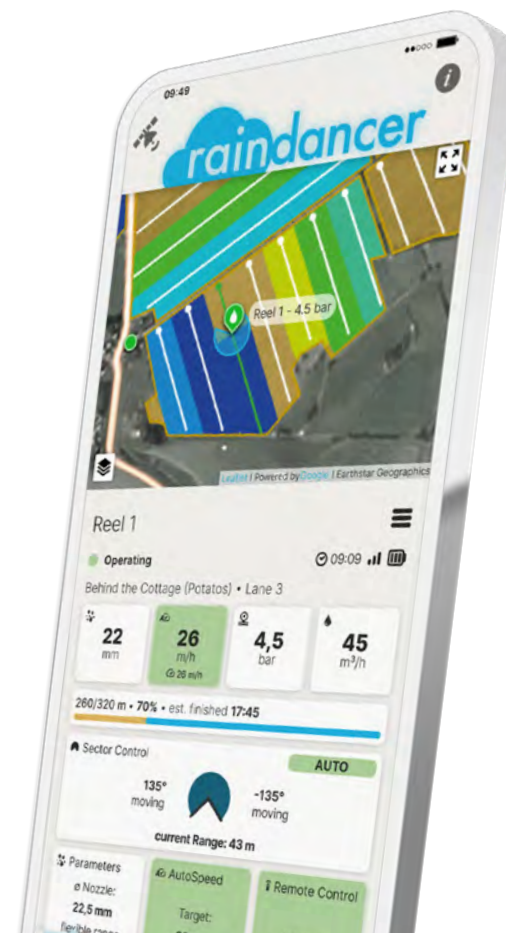
- Fields and field boundaries
- Irrigators, Wells, Pumps
- Teams, Users and Farms



Monitor & Control

Smartphone (Android, iPhone)

- Irrigation Overview
- Start and Stop
- Making Decisions





Hose Reel Machines



Self-Driving Machines



Pivot & Linears



Pumpcontrol



Irrigation Boom



Pipe Monitoring

Hardware and Mounting

- GPS receiver with solar power supply
- Pressure sensor with connection cable
- Tempered glass for easy cleaning
- Can be retrofitted on all irrigation machines

Mounting directly to the gun carriage

- No modification to the hose reel required
- For pivots and linear systems the installation takes place on the last span



Optional: Sector Control

- GPS-supported adjustment of the irrigated area
- The water stays on the field
- Enhanced water distribution
- Avoid double irrigation
- Irrigation around obstacles

Mission Map

- Previous activities are shown on the map
- The colours will change according to the time of the last irrigation
- Easy overview of which run needs to be irrigated next



Irrigation Legend



Current States of All Your Machines

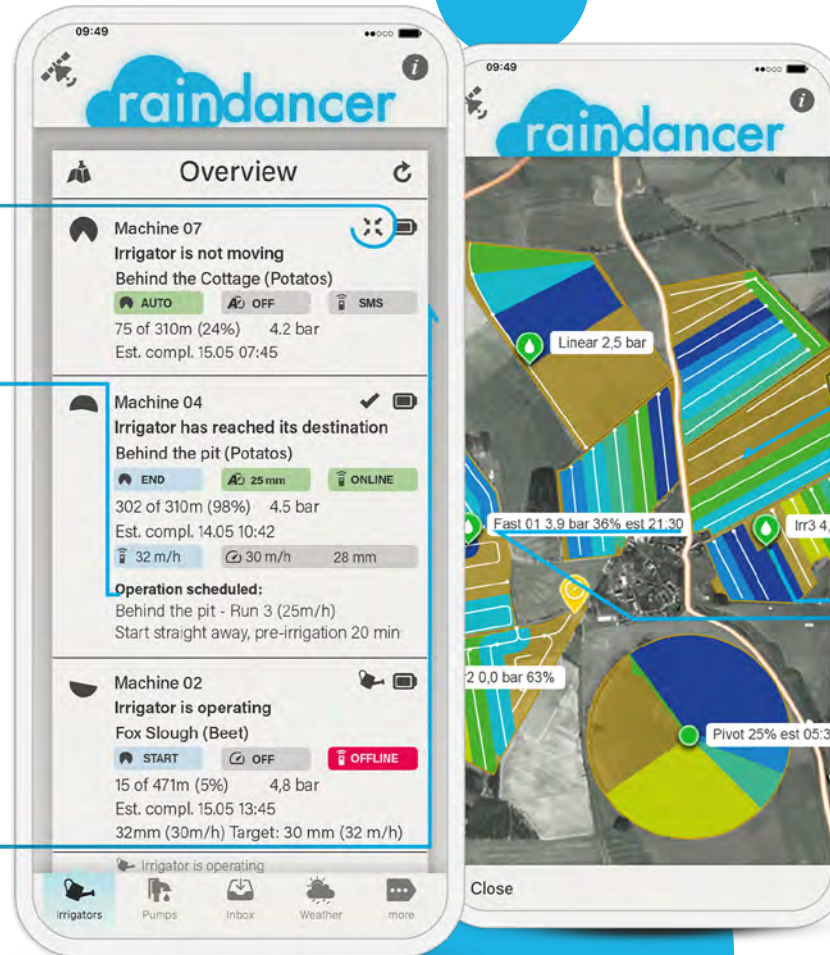
- ✖ Malfunctions
- ✓ Completed, Ready for Relocation
- 🚰 Irrigating

Every Detail About the Current Operation

- Field
- Distance and Current Progress
- Current Water Pressure
- Estimated Completion
- Scheduled Relocation
Field, Lane, Irrigation Amount

Intelligent Order

- First of All Machines with the Need for Attention



Keep an overview

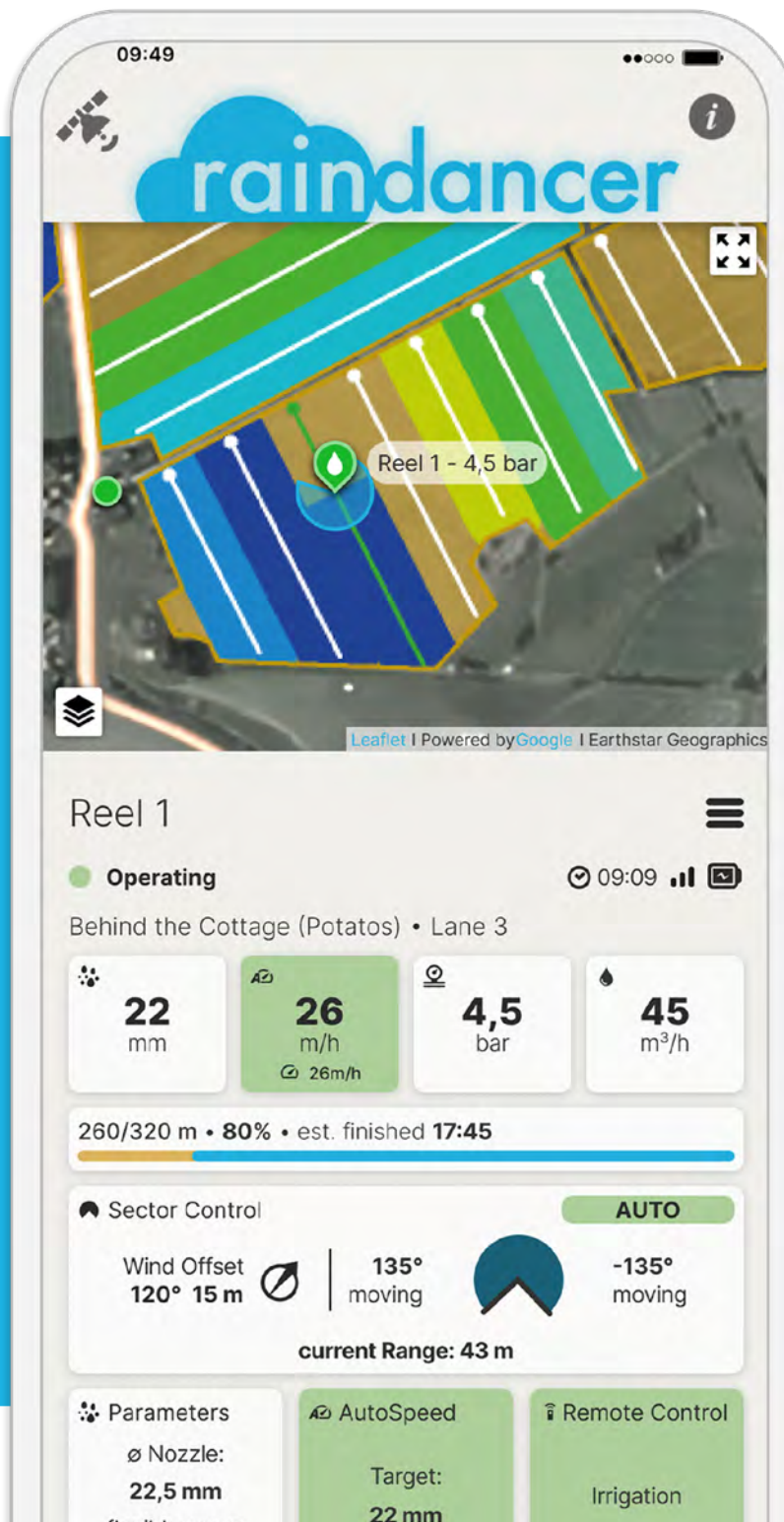
- Completed Irrigation Runs
- Pending Lanes

Monitor the Progress

- Location of the Machine
- Estimated Completion
- Water Pressure

Details About Completed Operations

- Time of Completion
- Amounts, Distances



Status Information

- Pressure
- Irrigation Amount
- Speed
- etc.

Operation Details

- Remaining time and progress of current irrigation
- Target water amount and nozzle size can be changed even during operation
- Irrigator-related remarks to help organise the daily routines
- Operational Details like field and wells are recognised automatic

Advanced Functions of the raindancer PRO Module

- Connection of sector control possible
- Temperature at the gun trolley
- Meter reading of the water meter
- Operation Angles of the current irrigation

Notifications

We'll keep you informed when you're not looking.

- No movement
- Pressure too high or too low
- Gun carriage is tilted
- No shutdown at destination
- In critical areas
(e.g. House, Street)

Pumps and irrigators can be switched off automatically in the event of a fault



Friday, 06. June
09:49

 **Raindancer**
The irrigator "Irrigator 7" is in an tilted position!

Friday, 06. June
09:49

 **Raindancer**
Pump "Behind the Yard" reports error:
Motor temperature too high

Friday, 06. June
09:49

 **Raindancer**
Irrigator 4 650/110 runs at 1.5 bar and has
fallen below the min. pressure of 3.0 bar

Friday, 06. June
09:49

 **Raindancer**
Irrigator 9 55/125 reached the destination

Friday, 06. June
09:49

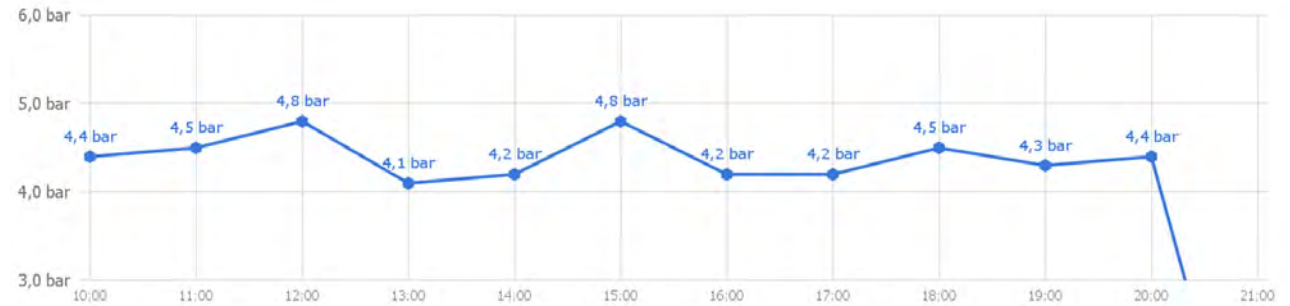
 **Raindancer**
Irrigator 4 650/110 runs at 1.5 bar and has
fallen below the min. pressure of 3.0 bar

Who has to be informed about what?

raindancer				
Notifications				
Select/Deselect all	Alert Area	Destination Reached	Fault	Warning
Max Power	✓	✗	✓	✗
Sven Sørensen	✓	✗	✓	✓
Jane Doe	✓	✗	✓	✓
Stephen Strange	✗	✗	✗	✗
Peter Porker	✓	✗	✓	✗
service	✗	✗	✗	✗
support	✗	✗	✗	✗

Calculating the irrigation amount

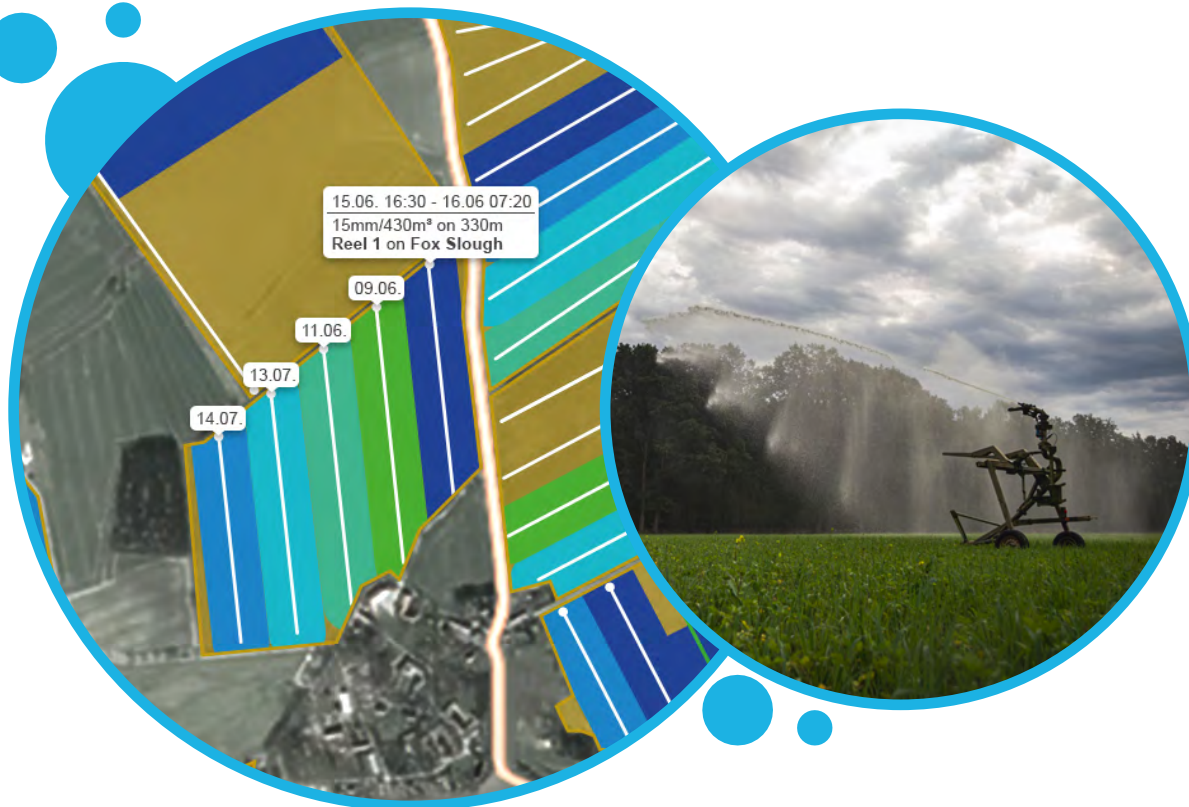
- Based on the pressure and the nozzle, the irrigation amount will be calculated
- The working width and operating distance serves as the basis for the irrigated area
- The Amount (m^3 and mm) is assigned to the irrigation run and well and is booked accordingly.



554 m^3

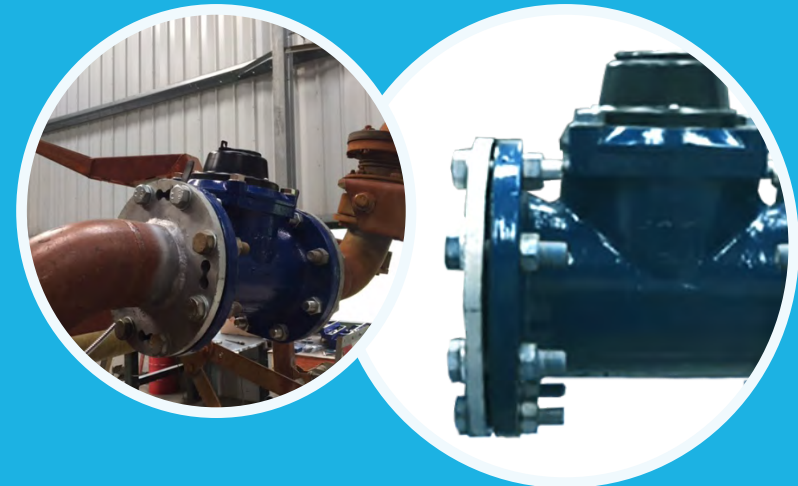
$\frac{554.000 \text{ l}}{72 \text{ m} \times 275 \text{ m}}$

28 mm



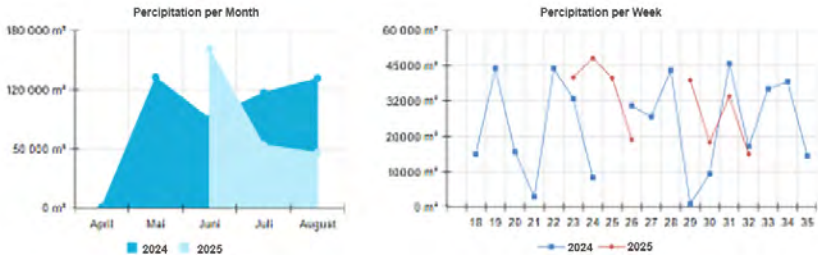
Optional: Connection of a water meter

- For accurate data, for water withdrawal, a water meter can be connected
- raindancer PRO Module is mandatory



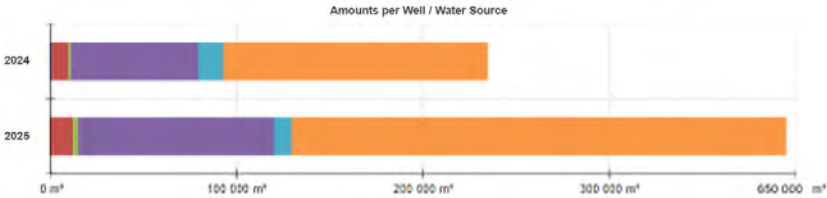
Automatic recording and reports

- Automatic logging
(Wells, Fields, Irrigator, Amounts, etc.)
- Basis for reports to the authorities
- Management views
- Distribution between farms
- Graphic reports over several years



Comparison per Year

Month	2024		2025		Sum	
	Q mm	m³	Q mm	m³	Q mm	m³
April	24.5 mm	1 679 m³			24.5 mm	1 679 m³
May	23.7 mm	130 589 m³			23.7 mm	130 589 m³
June	24.0 mm	327 738 m³	23.4 mm	134 251 m³	23.6 mm	462 563 m³
July	23.6 mm	117 582 m³	23.8 mm	53 433 m³	24.9 mm	167 945 m³
August	28.6 mm	103 032 m³	24.6 mm	46 045 m³	27.2 mm	102 007 m³
Summe	25.4 mm	680 538 m³	23.8 mm	234 602 m³	25.0 mm	910 423 m³



Data via API

- Access via API is possible
- Transfer your irrigation data in field catalogue or own applications



Export of the reports to Excel
Select by Time Spans, Areas, etc.

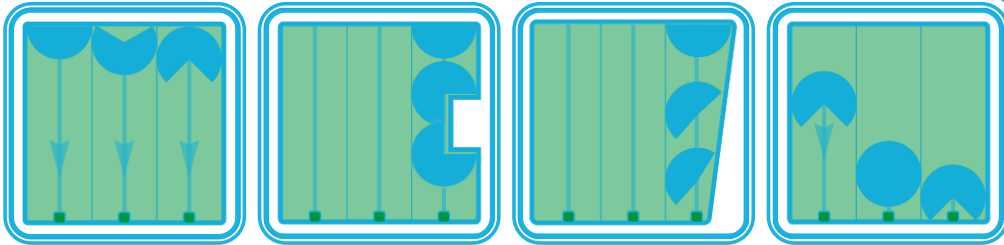
Register

Entnahmestelle / Brunnen	Abrech- nungs Art	Benutzername	Schlag	Startzeit	Endzeit	mm	h	m³	m³ Zählerstand Start	m³ Zählerstand Ende	Entfern- ung Start
Brunnen 1	m3	Max Muster	Waldinsel	03.07.2025 16:27:59	04.07.2025 11:56:06	27	20	975	56773	57097	458
Brunnen 1	m3	Max Muster	Waldinsel	03.07.2025 16:28:26	04.07.2025 16:05:56	29	24	1180	57097	57421	517
Brunnen 1	m3	Max Muster	Waldinsel	04.07.2025 12:21:35	04.07.2025 23:10:07	25	11	540	57421	57745	256
Brunnen 1	m3	Max Muster	Waldinsel	04.07.2025 16:53:01	05.07.2025 12:59:36	29	20	1005	57745	58069	440
Brunnen 1	m3	Max Muster	Waldinsel	05.07.2025 05:02:44	06.07.2025 00:47:32	27	20	985	58069	58393	464
Brunnen 1	m3	Max Muster	Waldinsel	05.07.2025 13:45:12	06.07.2025 13:31:01	29	24	1190	58393	58717	521
Brunnen 1	m3	Max Muster	Waldinsel	06.07.2025 05:55:07	07.07.2025 00:58:08	27	19	955	58717	59041	448
Brunnen 1	m3	Max Muster	Waldinsel	06.07.2025 14:46:02	07.07.2025 14:13:54	30	24	1175	59041	59365	507
Brunnen 1	m3	Max Muster	Waldinsel	07.07.2025 05:08:48	08.07.2025 00:19:36	27	19	960	59365	59689	453
Brunnen 4	m3	Max Muster	Talrand	07.07.2025 16:07:12	08.07.2025 06:32:52	28	14	720	59689	60013	315
Brunnen 4	m3	Max Muster	Talrand	17.06.2025 05:08:11	17.06.2025 21:05:43	21	16	880	60013	60337	522
Brunnen 4	m3	Max Muster	Talrand	17.06.2025 05:08:30	17.06.2025 19:23:54	25	14	786	60337	60661	397
Brunnen 4	m3	Max Muster	Talrand	17.06.2025 05:08:50	17.06.2025 22:12:01	22	17	941	60661	60985	545
Brunnen 4	m3	Max Muster	Talrand	17.06.2025 19:24:16	18.06.2025 18:35:20	25	23	1276	60985	61309	668
Brunnen 4	m3	Max Muster	Talrand	17.06.2025 22:36:25	18.06.2025 16:30:26	22	18	984	61309	61633	584
Brunnen 4	m3	Max Muster	Talrand	17.06.2025 22:37:09	18.06.2025 13:33:31	22	15	820	61633	61957	482
Brunnen 4	m3	Max Muster	Talrand	18.06.2025 13:46:03	19.06.2025 00:04:42	21	10	566	61957	62281	333
Brunnen 4	m3	Max Muster	Talrand	18.06.2025 18:30:29	18.06.2025 23:37:45	19	5,1	280	62281	62605	163
Brunnen 4	m3	Max Muster	Talrand	18.06.2025 18:30:42	18.06.2025 21:59:10	23	3,5	192	62605	62929	79
Brunnen 4	m3	Max Muster	Talrand	02.07.2025 20:33:26	03.07.2025 13:46:19	25	17	946	62929	63253	482

Automatic Sector Control

Get water to the right place

- Suitable for all long-range irrigation guns
- No pre-irrigation required
- Irrigation starts at the field border, gun pointing towards the field



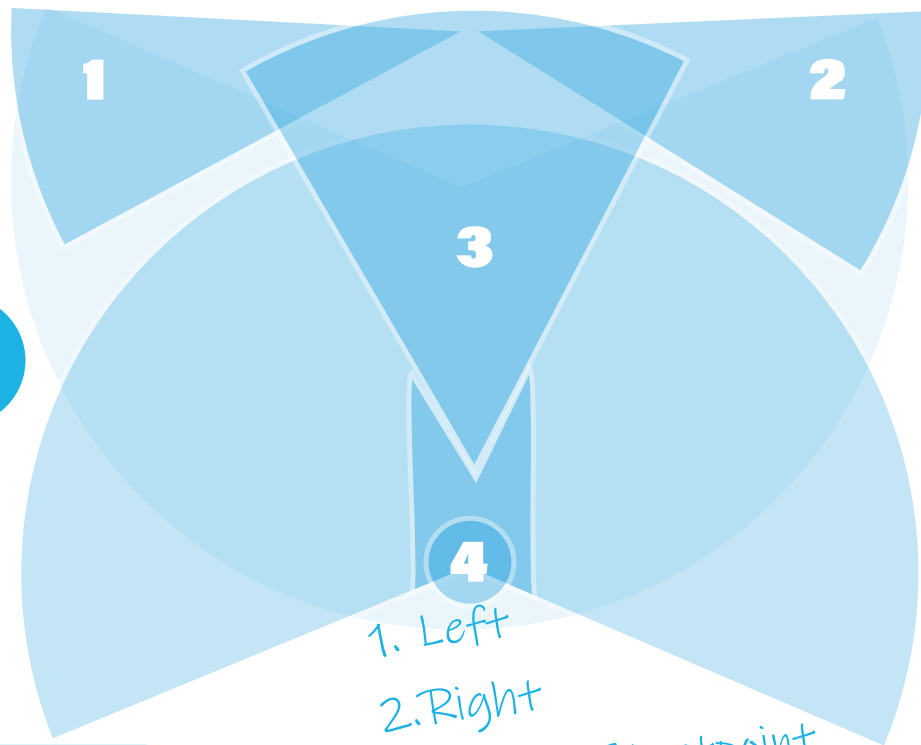
- Stops are adjusted automatically according to the shape of the field or obstacles.
- Configurable standard angles for the sector stops (e.g. 360° or 270°)
- Speed is adjusted according to the irrigated area
- Manual intervention via remote control using the app is possible (e.g in changing wind conditions)
- Enables maximum utilisation of the field area without wasting any water.





raindancer.com/Sectorprogram

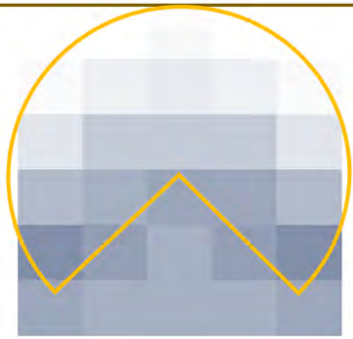
That's how it works!



Efficient right from the start

- Start and end programm with multiple phases
- Optimised water distribution at the field boundary
- Uniform water distribution over the entire operation
- Adjusted water quantity in each segment

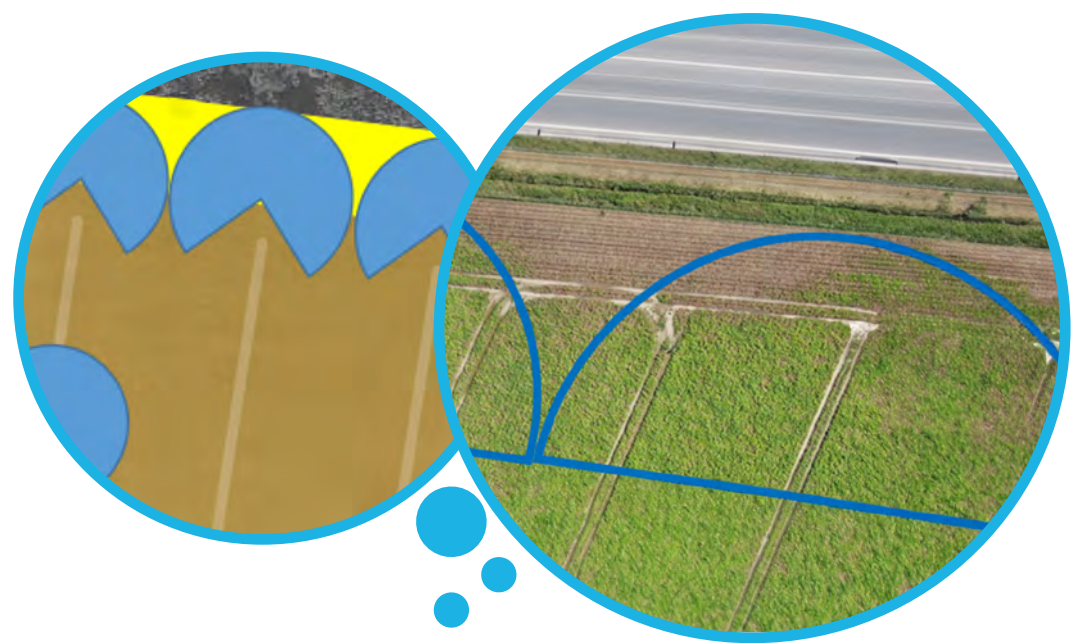




Without Raindancer:

30 minutes pre-irrigation

- Significant undersupply at the field boundary
- About ¼ ha are insufficiently irrigated

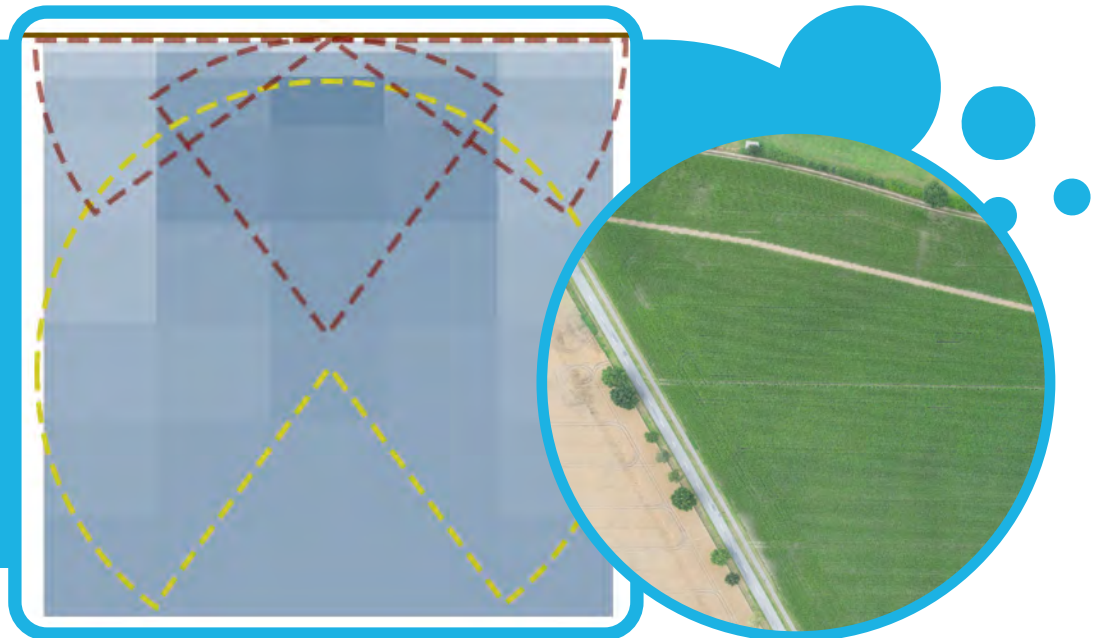


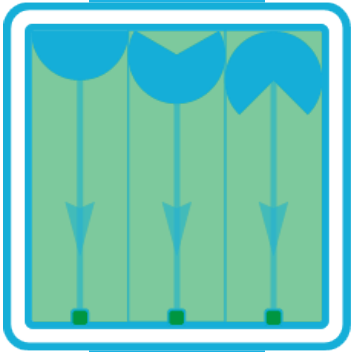
With Raindancer Sector Control

- Water comes up to the field boundary (start and end)
- Gradually adjustment of the irrigation angles with every meter
- More irrigated area

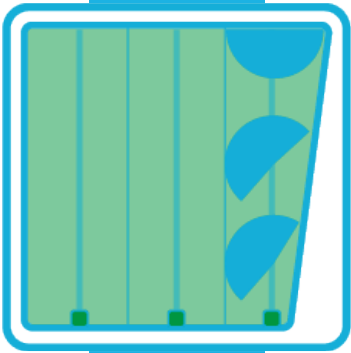
Multi-phased Start and end program

- Time-based irrigation at the beginning
- Most uniform irrigation of the entire border area
- Significant advantages in the headland
- Regular speed adjustment

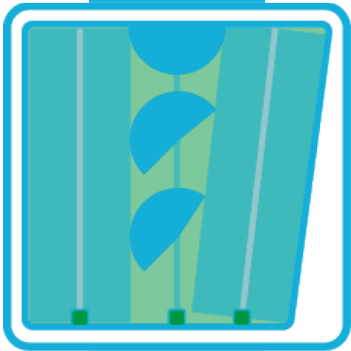




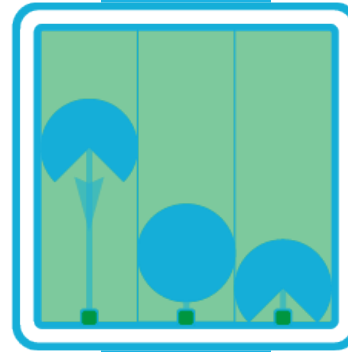
- Reach into every corner
- No pre-irrigation required
- Irrigate evenly



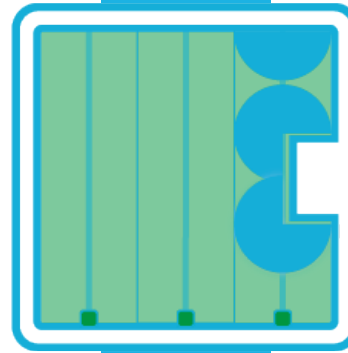
- Adapts to curvy and angular fields
- Angle adjustment is performed gradually



- Prevent double watering



- Get more water
In front of the machine
- Water to the field boundary

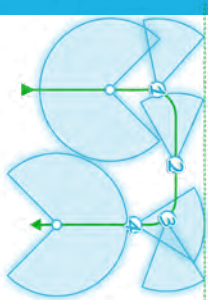


- Irrigate around obstacles
- Brings water even to hard-to-reach areas



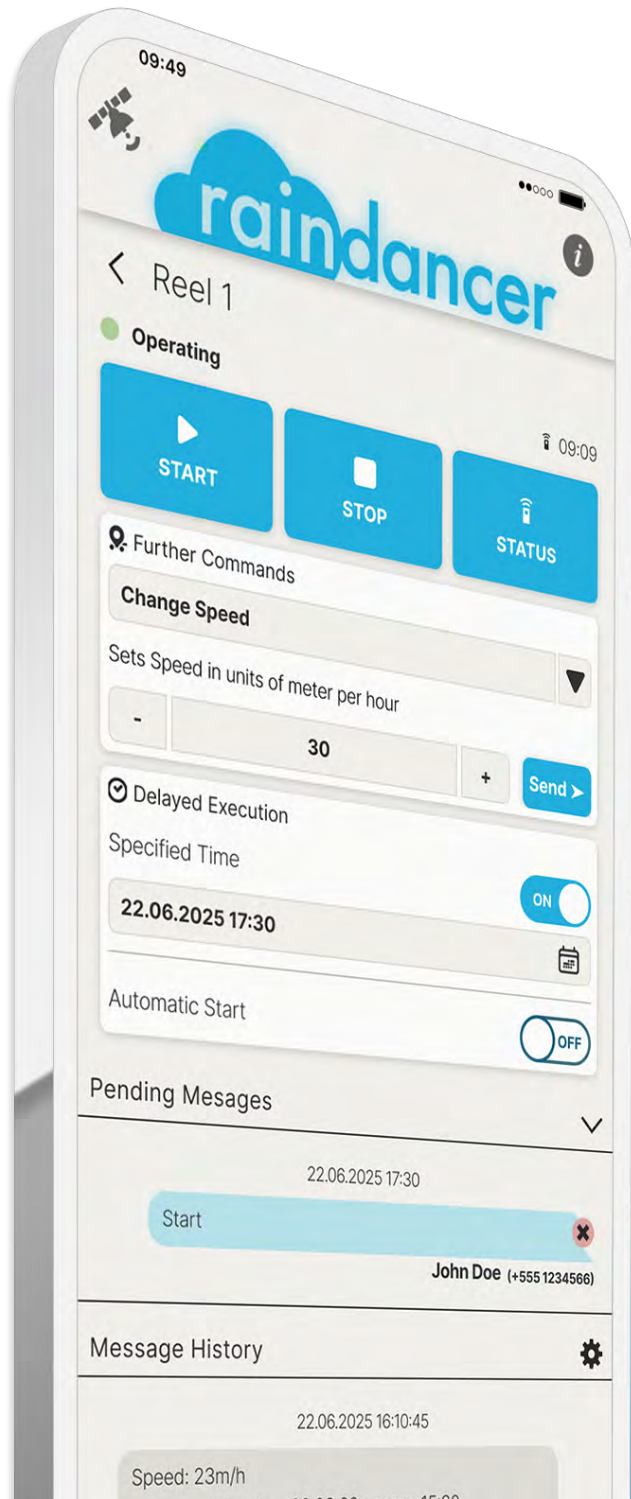
Self-Driving Machines in curves:

- Limit irrigation sector
- Increase Speed
- Automatic Curve Programm



Remote control of your irrigation system

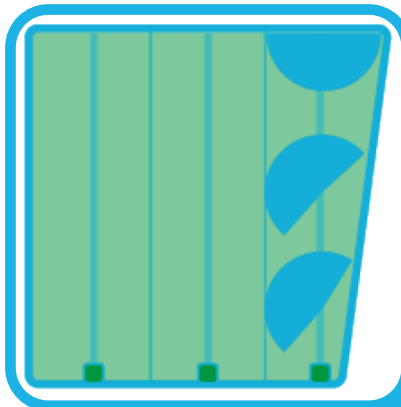
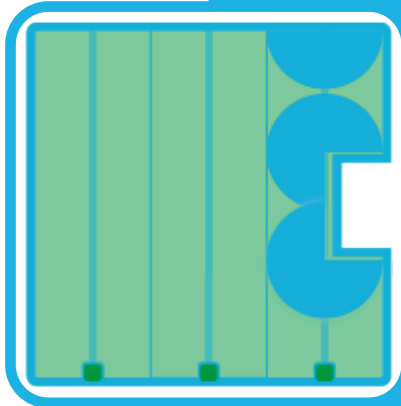
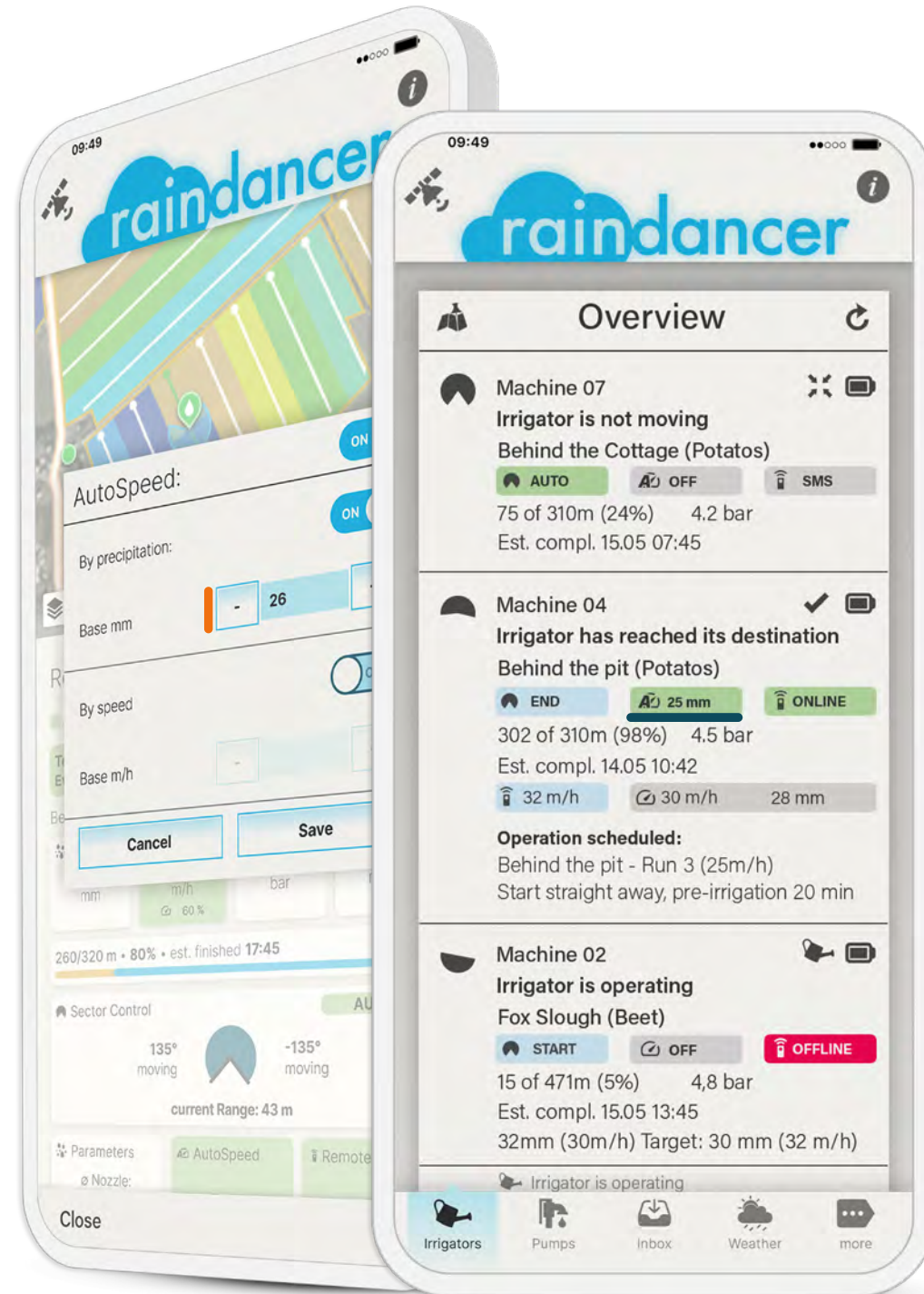
- Machine controls of most manufactures are already
- Start, stop, adjust speed and more
- Timed actions like start and stop
- Internet-based and text message controls



Autospeed

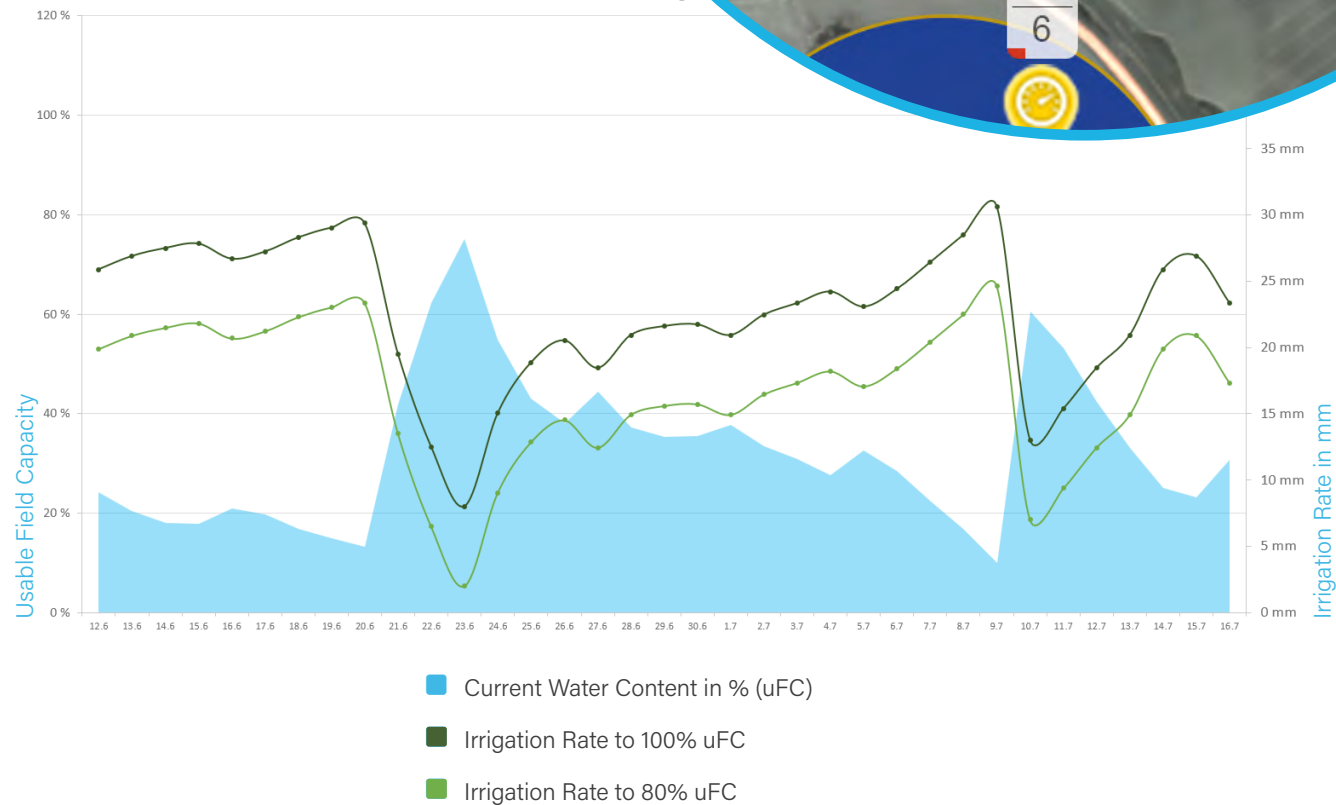
Cruise control for your irrigation

- Setup irrigation rate in mm
- The speed is calculated based on nozzle size, the current pressure and the working width
- In the case of a narrowing run or a pressure drop, the speed is recalculated regularly
- The irrigation rate remains constant



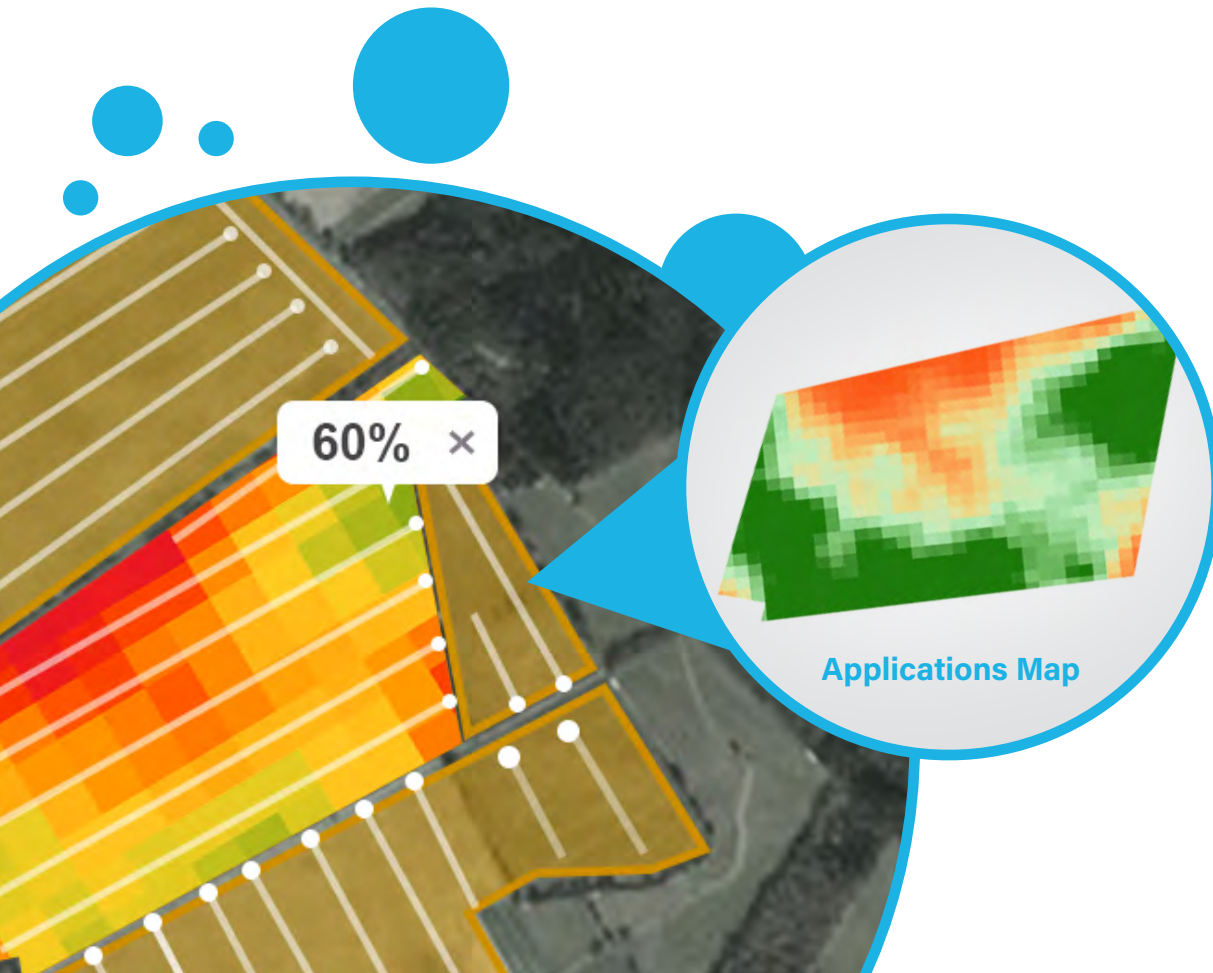
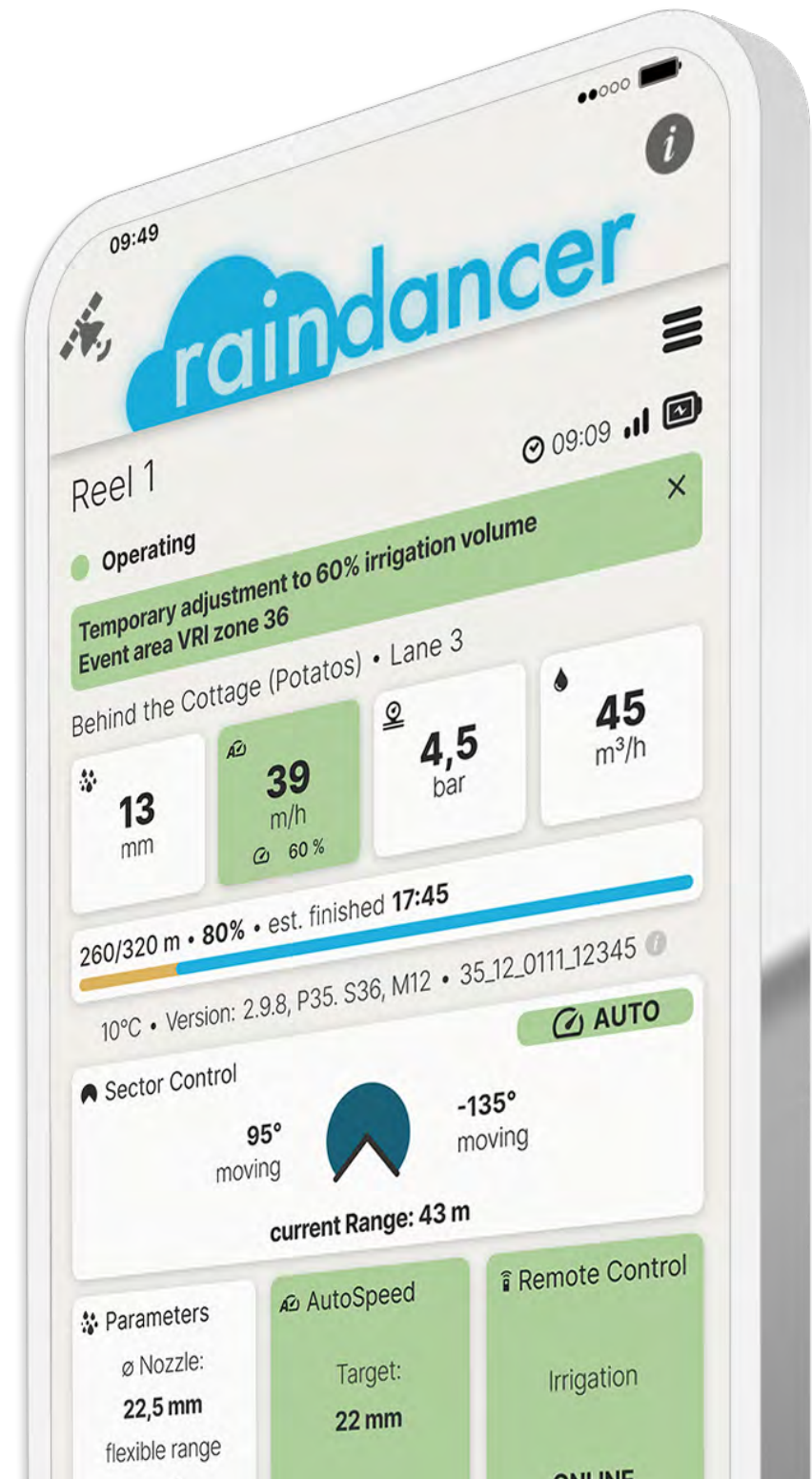
Irrigation according to demand

- Various weather stations and soil moisture sensors can be integrated into the system
- The individual soil composition of the field is used as the basis for the calculation
- Irrigation recommendation based on the soil moisture in the depth reached by the roots
- Irrigation recommendation of 80% or 100% of usable field capacity (uFC) is achieved.



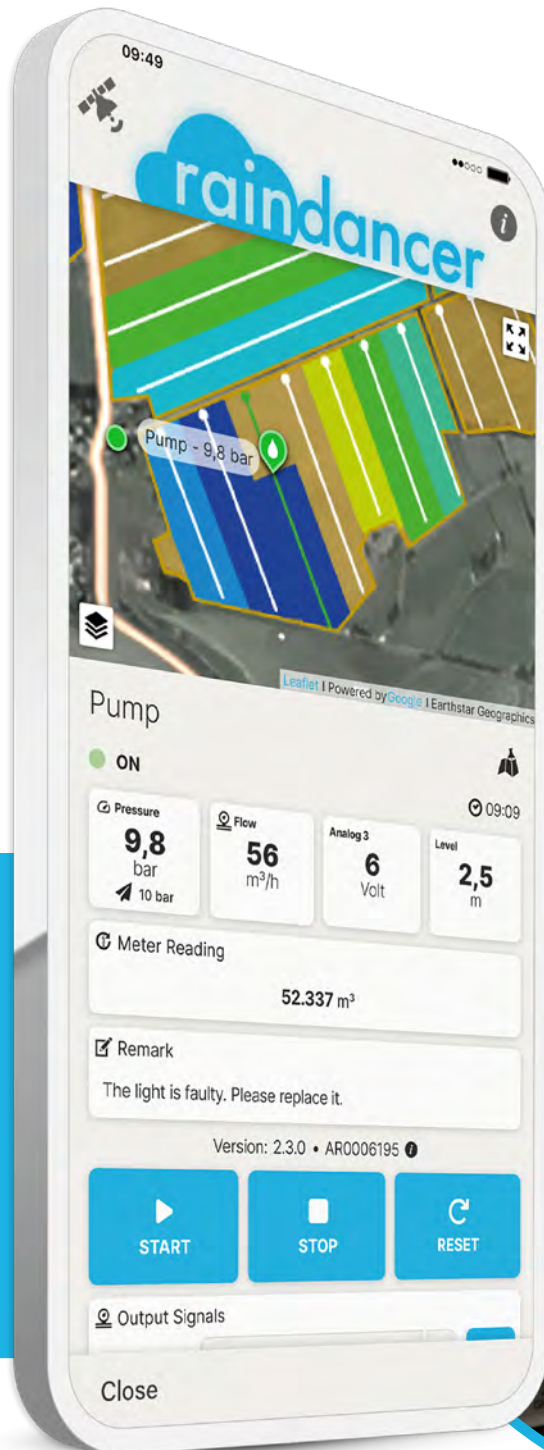
Always the right amount of water

- Variable rates irrigation based on
e.g. satellite images of biomass or yield maps
- Just the right amount of water in the right place
- Save water and energy through demand-based irrigation



Monitor and control your pumps

- Retrofittable for most electric pumps
- Communication via internet
(LTE cellular or existing LAN)
- Monitor status in real time
like flow, meter reading, power or pressure
- Remote control
(start, stop, adjust pressure)
- Notification in case of malfunction



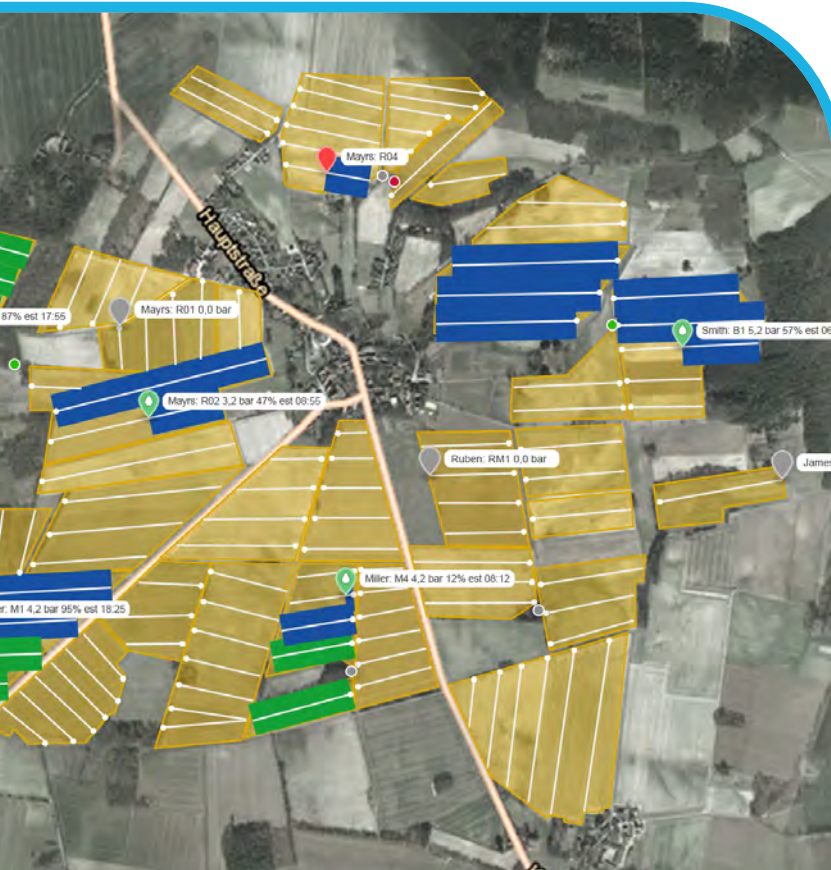
Automated pumps

- Target pressure control between irrigator and pump
- Turn on/off pumps according to demand
- Pressure regulation within pump networks with several machines



Teamwork makes the dream work

- Permanent overview of irrigators and pumps in networks
- Optimised pump control
Save energy, time and costs!
- Scheduling the use of irrigators
- Detection of faults in the network
- Pipe leakage detection



Irrigation Plan

Netzwerk 1

	6.08.2021	12	18	17.08.2021	0	6	12	18	0
Jane Doe									
Max Mustermann									
Muster GBR									
Bernd Musterhagen									
Petra Müller									
Nordkartoffel GBR									
Südthagen									
Schuster									





What are the benefits of raindancer monitoring?

- Better data provides better decisions
- Fewer visits
- Fully automated documentation of water amounts
- Save valuable time

Why do I need sector control?

- Full control over your irrigation gun at all times
- More land utilisation
- Using water in a precise manner
- Less trouble with residents or authorities

How does the Raindancer Beacon help in my daily work?

- Remote control pumps to start and stop
- Additional safety by real-time monitoring
- Let your pumps just work as hard as they really need to
- Save energy



We make a hard job a little easier!

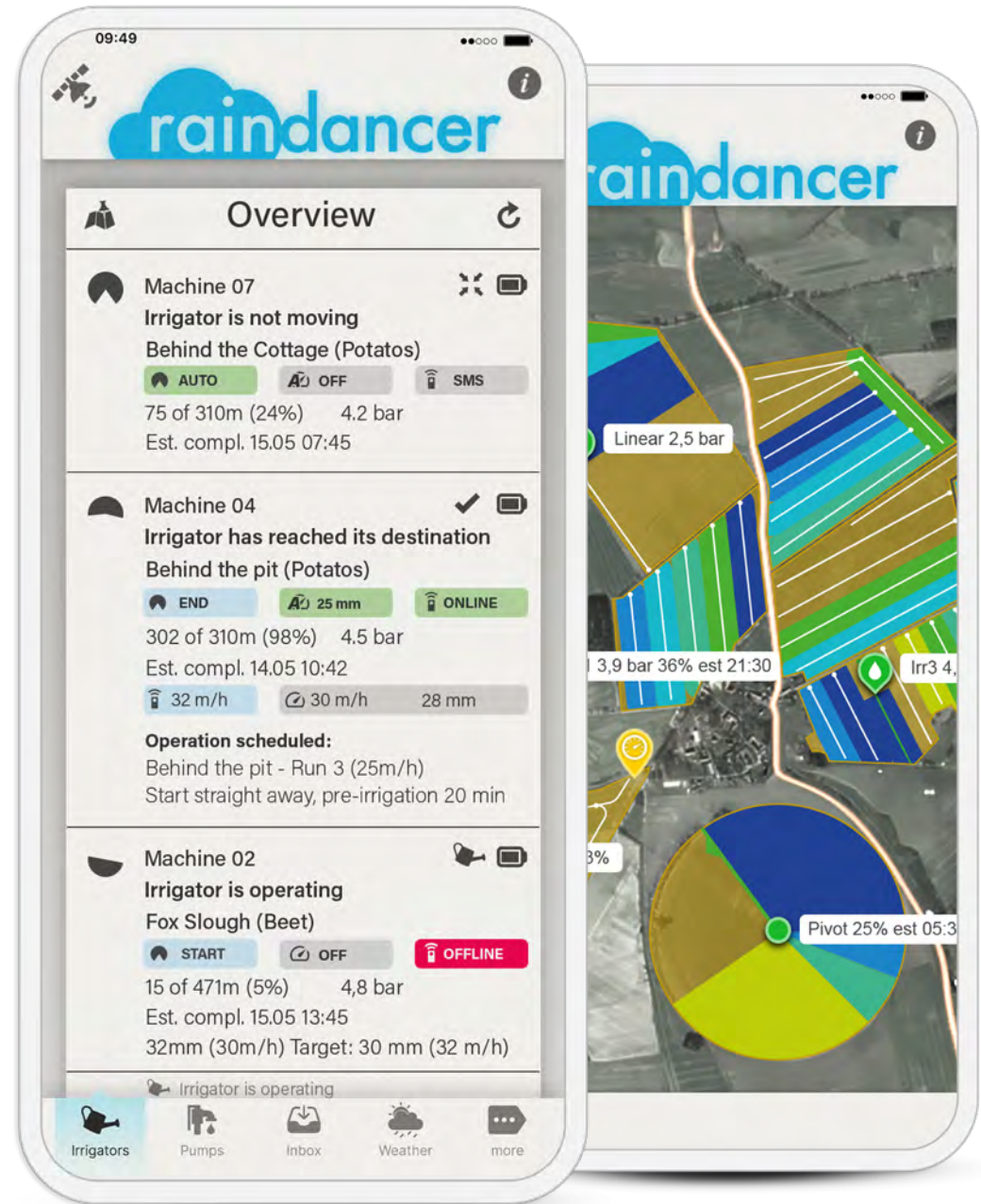
Make your life easier too and become part of the Raindancer family!

If you decide to start your journey with Raindancer, we won't leave you "out in the rain".

We will help you get started with a collaborative set-up and we always focus on offering excellent service.

We have many more ideas for the future and we would love you to join us in the Raindancer family!

Get some of your valuable time back!



Raindancer **GPS Module**

- GPS
- LTE Modem incl. worldwide usable Multi-Sim
- Tilt Sensor
- Pressure sensor port
- Solar panel made of tempered glass

Raindancer **GPS Pro Module**

- + Additional port for additional peripherals
- + Sector control possible
- + Connection for a water meter
- + Use as GPS pump monitor



Raindancer **Sector Control**

- Automatic adjustment of the stops based on the field boundaries
- Watering around obstacles
- Even water distribution from start to end
- Can be retrofitted to all large-area irrigation guns

- Manual action is always possible via the app
- Actively avoid double irrigation

*Raindancer PRO Module mandatory



Raindancer **Beacon**

- Remote control of most electric pumps
- Real-time monitoring of the pump
- Automatic stop in case of faults or at defined times
- Automatic pressure control based on the working pressure of the irrigation



LTE Router

- Preconfigured industrial router
- Option for external antennas
- Incl. Multi-Sim card



Ceramic Pressure Sensors

- Compact stainless steel housing
- Robust construction
- High pressure tolerance
- + Special pressure ranges for use in pivot irrigation or pumps



Mounting Set for GPS Modules

- Stainless steel bracket set
- Mounting directly under the gun
- Compatible with raindancer Sector Control
- No welding needed



Digital Water Meters

- Installation on the gun carriage or in the pump housing possible
- Digital and analogue recording of the used water quantities
- Various sizes
- Compatible with sector control



[youtube.com/@RaindancerGPS](https://www.youtube.com/@RaindancerGPS)



[instagram.com/raindancer_gps](https://www.instagram.com/raindancer_gps)



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