



GPS-Fleet Management
for Your Irrigation Equipment

raindancer - GPS Fleet Management

Using raindancer, you are able to monitor and to control your irrigations via smartphone or PC.

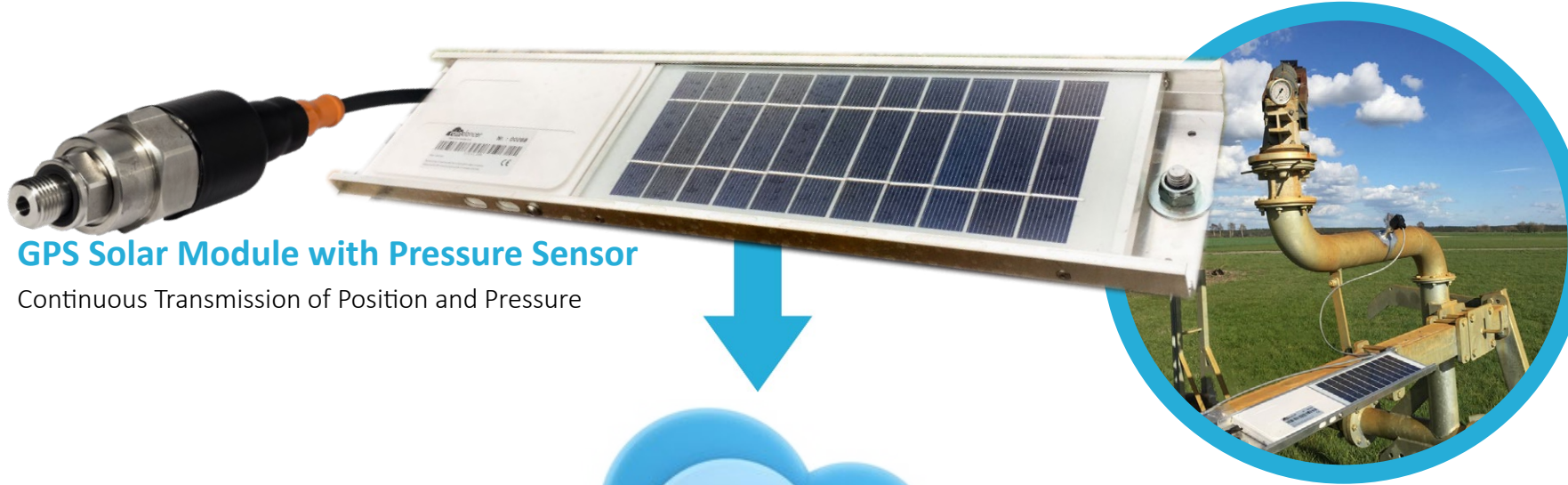
Using [raindancer](#) is very easy and it is available for **every irrigation machine**.

What is it about?

- All Important Information at a Glance
- Fault Detection and Notification
- Dispatching and Scheduling Relocations
- Team Management
- Remote Control
- Documentation

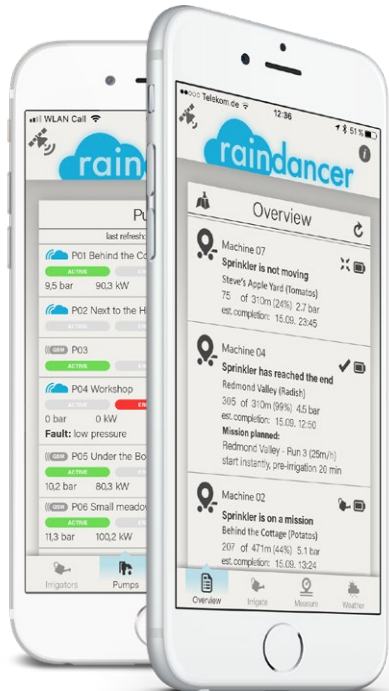


Features



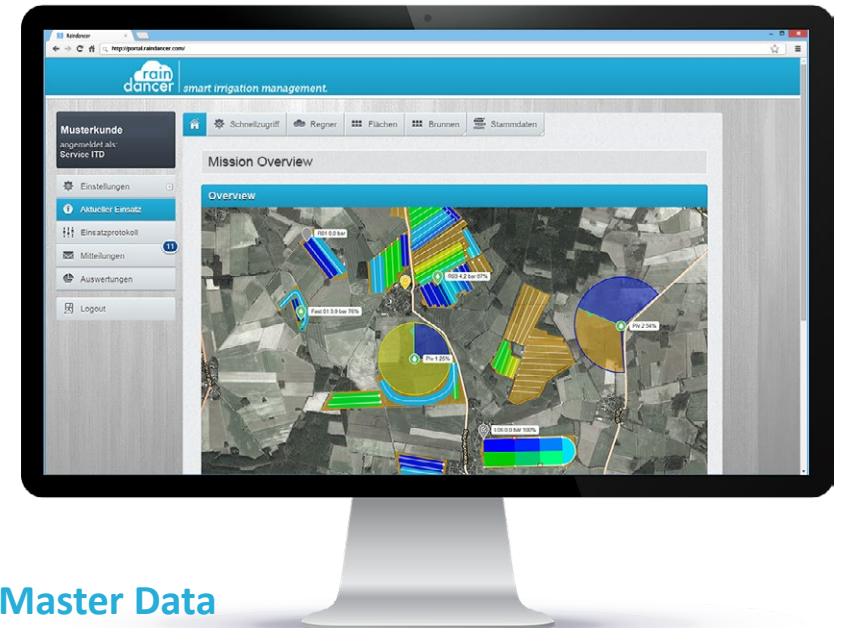
GPS Solar Module with Pressure Sensor

Continuous Transmission of Position and Pressure



Smartphone

iPhone / Android



Maintain Master Data

Web-Browser (Internet Explorer, Firefox, Chrome)

- Fields with Field Boundaries
- Irrigators, Wells and Pumps
- Teams, Users and Farms

- GPS Receiver with Solar-Powered Energy Supply
(5 Days of Battery Life)
- Pressure Sensor with Connection Cable
- Installation Only on the Gun Carriage
(No Installation on the Hose Reel)
- Suitable for All Irrigation Machines

Current position and pressure are transmitted to the [raindancer](#) software continuously.



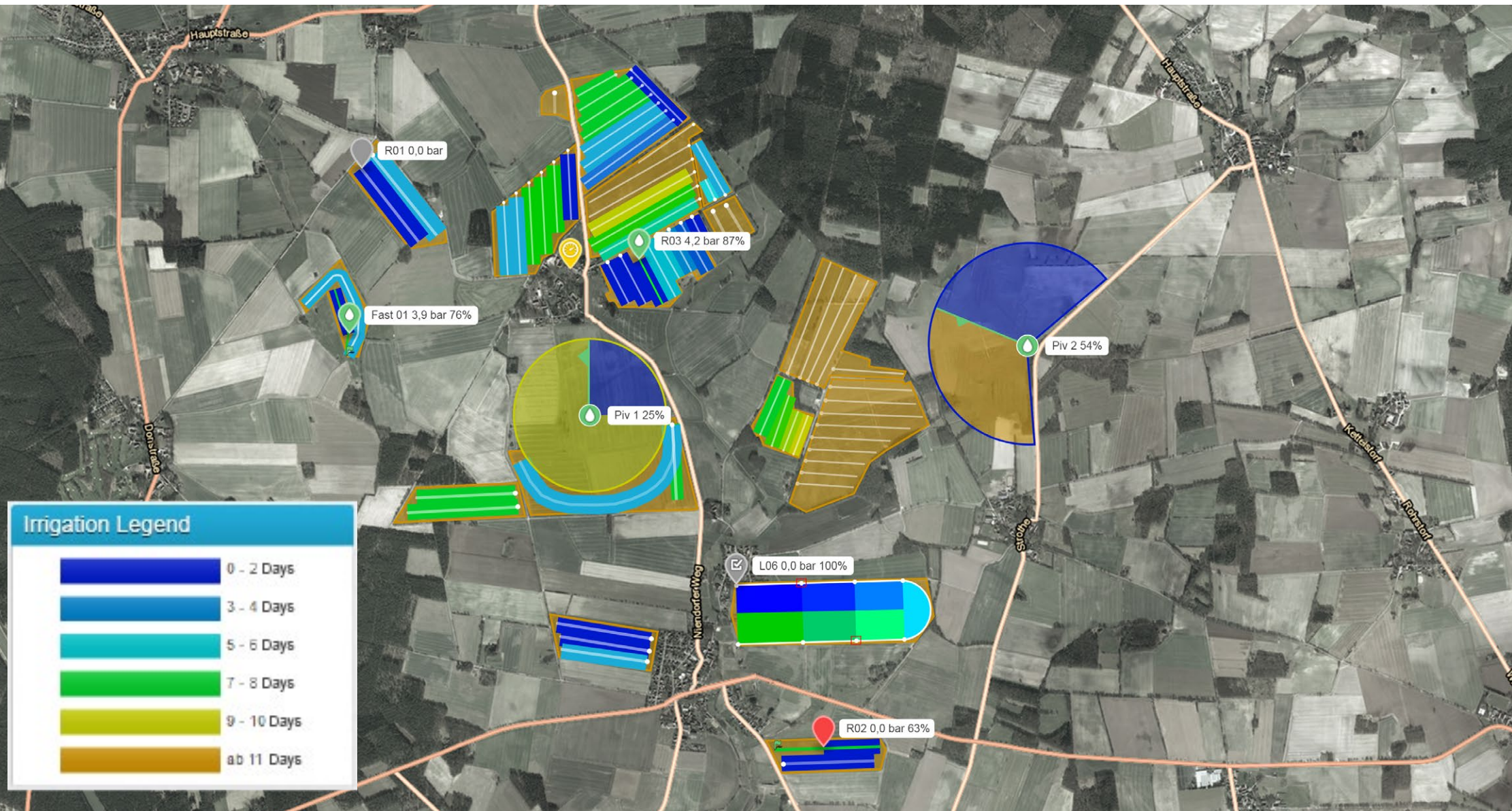
Pivots and linear irrigation machines



Hose reels

Operation Overview

Irrigation runs are detected automatically, providing a comprehensive monitoring experience.



Operation Overview



Current States of All Your Machines

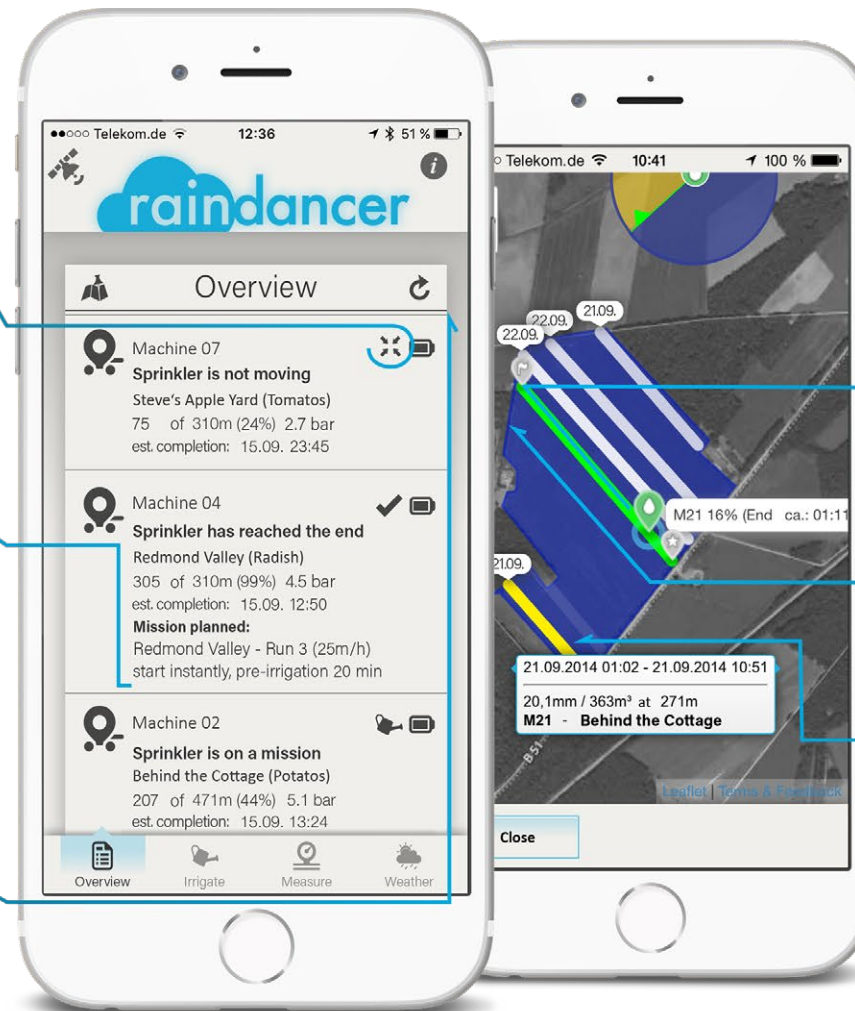
- ✖ Malfunctions
- ✓ Completed, Ready for Relocation
- 🚰 Active Irrigation

Every Detail About the Current Operation

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

Intelligent Order

- Sorted by the Need for Attention



Monitor the Progress

- Location of the Machine
- Estimated Completion
- Water Pressure

Keep an Overview

- Completed Irrigation Runs
- Pending Lanes

Details About Completed Operations

- Time of Completion
- Amounts, Distances

Order:

- Machines with Malfunctions
- Machines Awaiting Relocation
- Operating Machines Ordered by Estimated Time of Completion
- Machines Currently Not Operating

Status Information

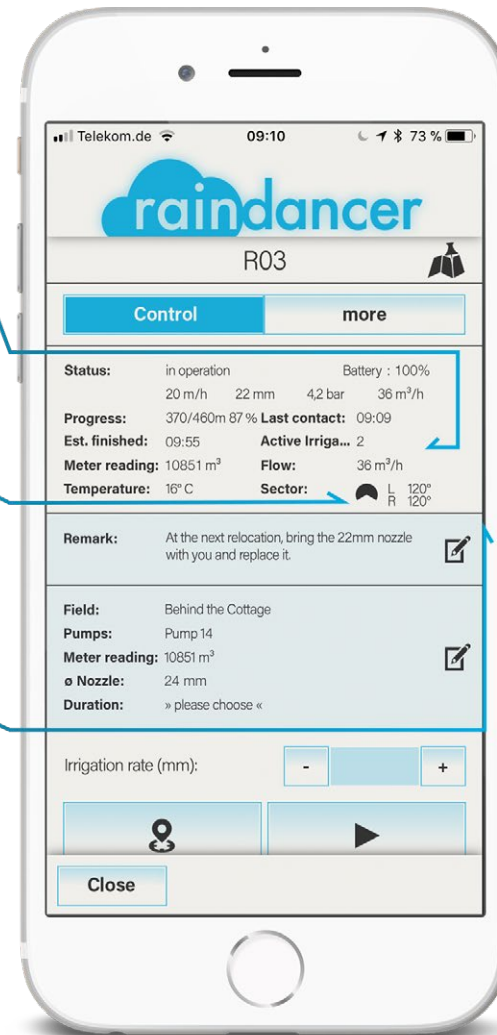
- Pressure
- Irrigation Quantity
- Speed
- Flow Rate
- etc.

Advanced Functions of the raindancer PRO Module

- Temperature at the Machine
- Current Water Meter Reading
- Sectors of Current Irrigation

Operation Details

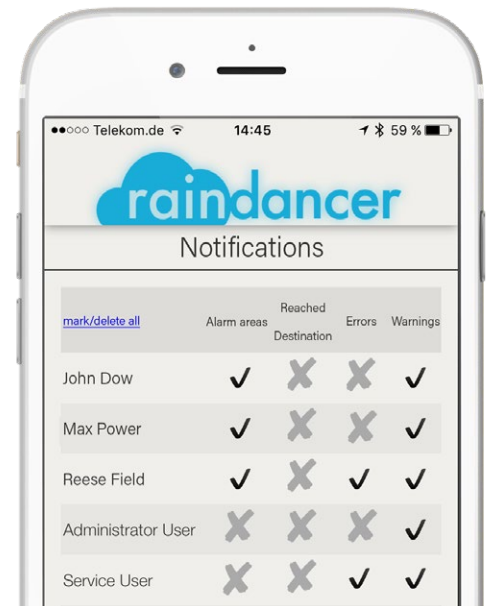
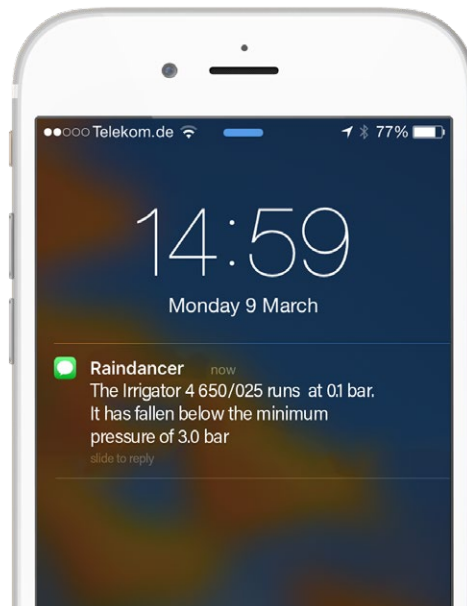
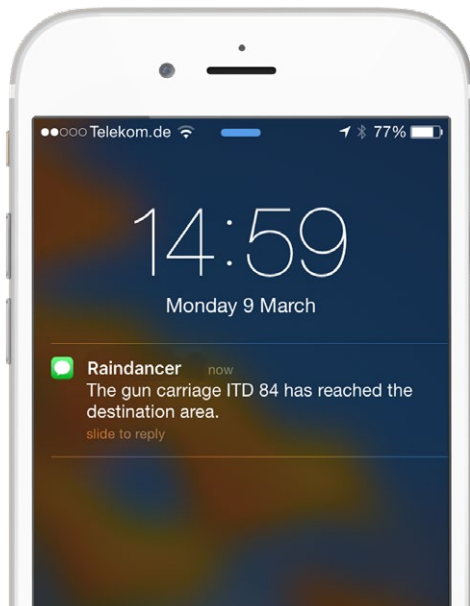
- Irrigation-Related Remarks
Help to Organize Daily Work Routine
- Operation Details, Such as
Fields or Pumps
Recognized Automatically



Text Messages on Malfunctions



- No Movement
- Pressure Too Low or Too High
- The Gun Carriage Is Tilted
- Irrigation Did Not Stop at the Destination
- Critical Areas Will Be Reached
(Building, Street, etc.)

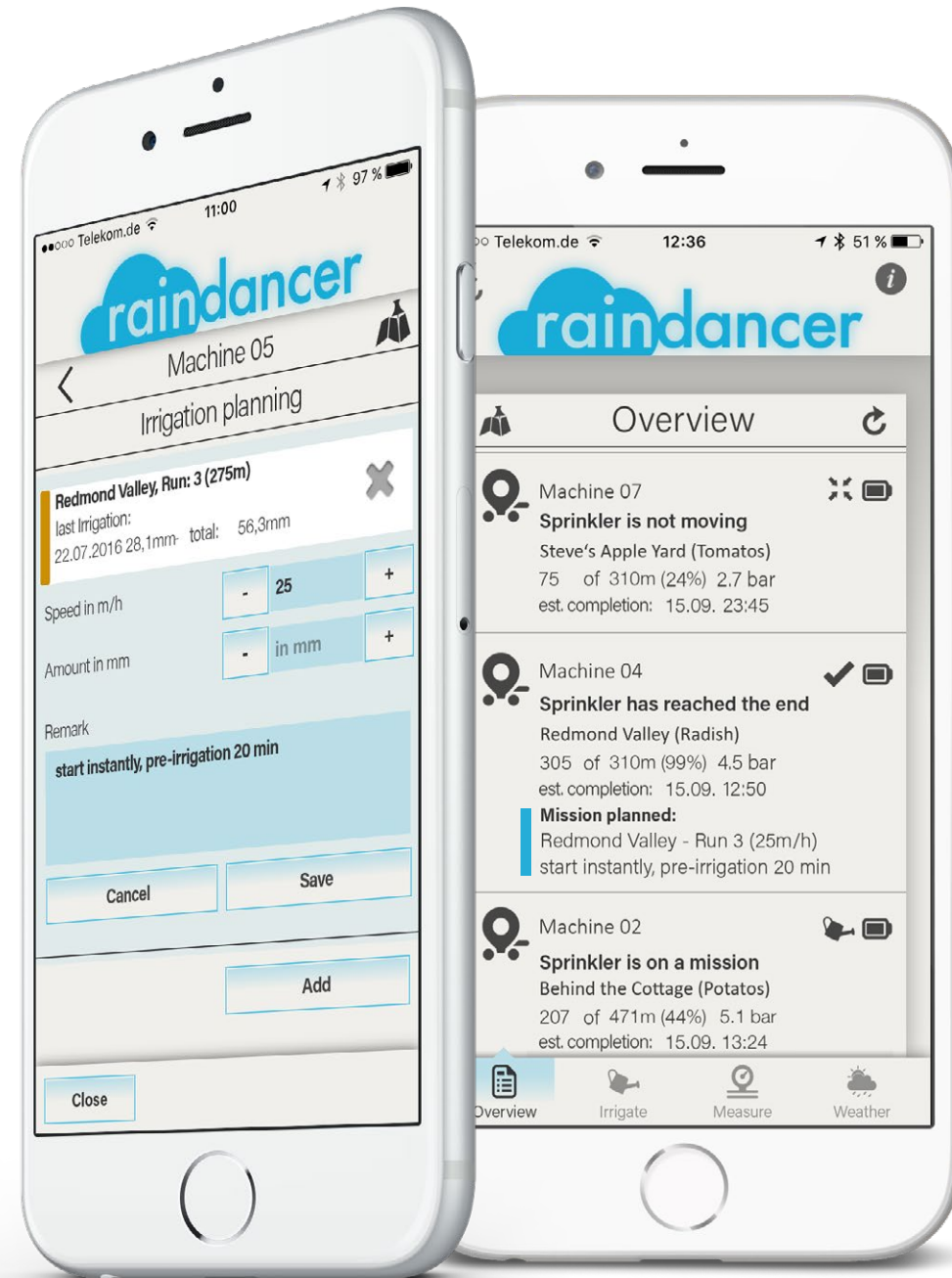
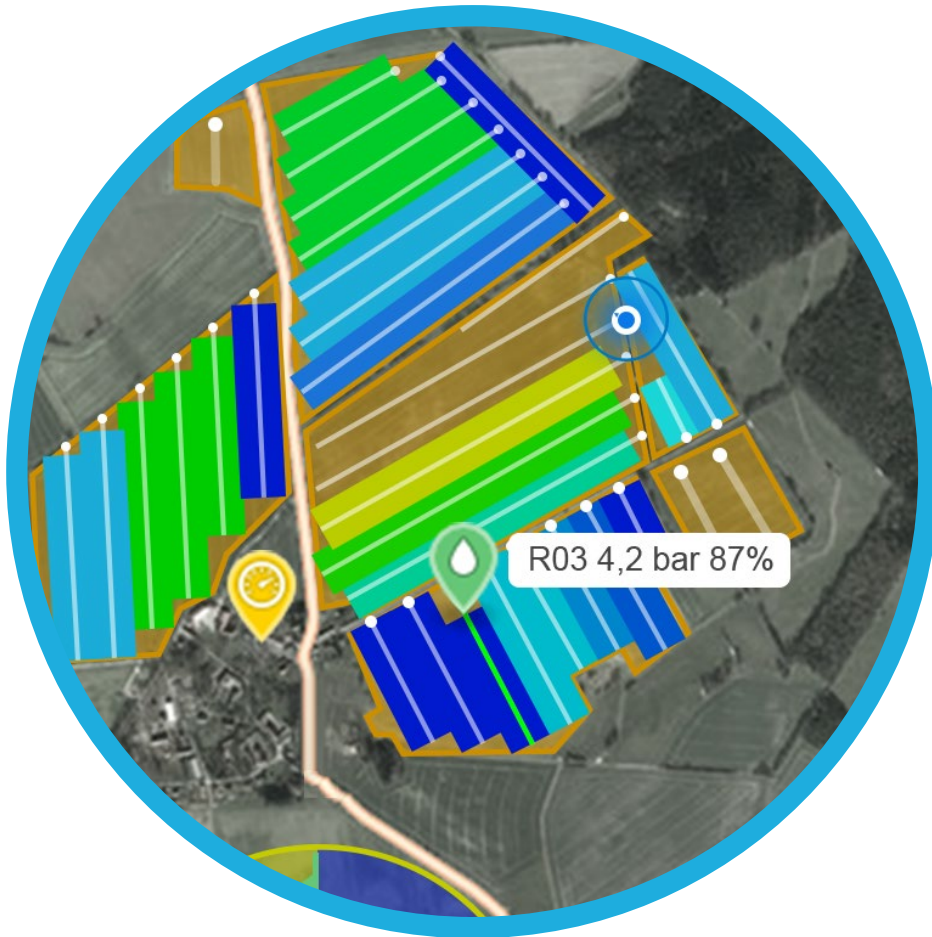


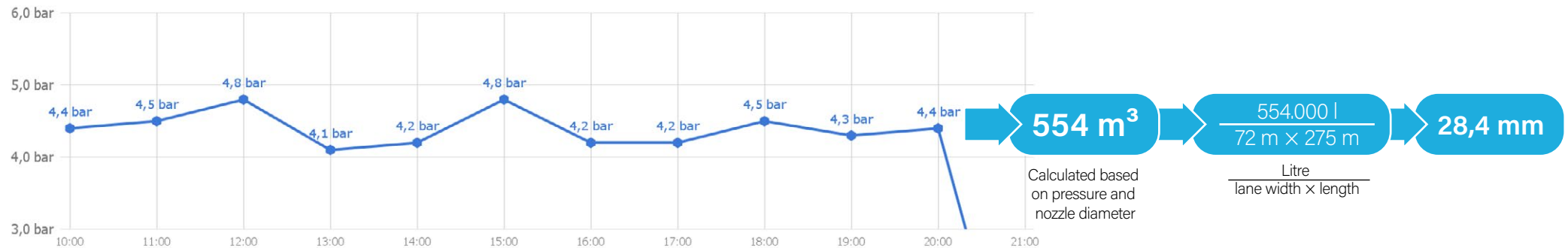
raindancer				
Notifications				
mark/delete all	Alarm areas	Reached Destination	Errors	Warnings
John Dow	✓	✗	✗	✓
Max Power	✓	✗	✗	✓
Reese Field	✓	✗	✓	✓
Administrator User	✗	✗	✗	✓
Service User	✗	✗	✓	✓

Planning Relocations



- The App Shows to the Employees
Where the Machine Has to Be Relocated to
(Field, Lane, etc.)
- The Employees Will Find the Correct Lane Without
Any Problem, Even on Difficult Fields





The used nozzle can be adjusted on the smartphone



Calculation of Irrigation Amounts

- The Irrigation Amount Will Be Calculated Based on Pressure and the Gun's Nozzle Diameter
- The Amount of Water Will Be Assigned to the Irrigated Run and Field

Optional: Connect a Water Meter

- A Water Meter Can Be Connected for More Precise Data
- [raindancer](#) PRO Is Required



Documentation and Reports



- Automatic Recording
(Wells, Fields, Irrigator, Amounts, etc.)
- Reports for Authorities
- Management Views
- Accounting Among Several Farms
- Export as Excel
- Access via API Possible
(Farm Software or Own Applications)

Mission Protocol							
Missions							
Mission Time	Irrigator	Field	Well	mm	m³	h	m
10.06.2016 09:43:29							
09.06.2016 12:04:47 09.06.2016 22:09:59	Machine 01	Behind the Cottage	Well 1	26,1	318	7,5	133
09.06.2016 10:42:37 10.06.2016 06:38:25	Machine 02	Behind the Cottage	Well 1	23,8	895	19,8	486
09.06.2016 09:44:56 10.06.2016 01:43:29	Machine 05	Behind the Cottage	Well 1	21,1	656	15,9	396
09.06.2016 08:57:25 09.06.2016 18:38:22	Machine 05	Behind the Highway	Well 15	21,8	444	9,7	247
09.06.2016 06:37:51 09.06.2016 08:12:11	Machine 01	Behind the Highway	Well 15	28,9	475	0,4	192
08.06.2016 21:20:39 09.06.2016 07:19:29	Machine 05	Behind the Cottage	Well 1	25,8	328	10,3	167
08.06.2016 20:44:06 09.06.2016 04:54:24	Machine 01	Redmond Valley	Well 23	21,9	448,5	9,9	249
08.06.2016 15:49:24 09.06.2016 08:16:24	Machine 01	Redmond Valley	Well 23	26,3	870	16,3	423
08.06.2016 12:09:53 09.06.2016 05:04:51	Machine 02	Behind the Cottage	Well 1	22,2	722	17,0	416

Export Reports to Excel

Select by Time Spans, Fields, etc.



Register

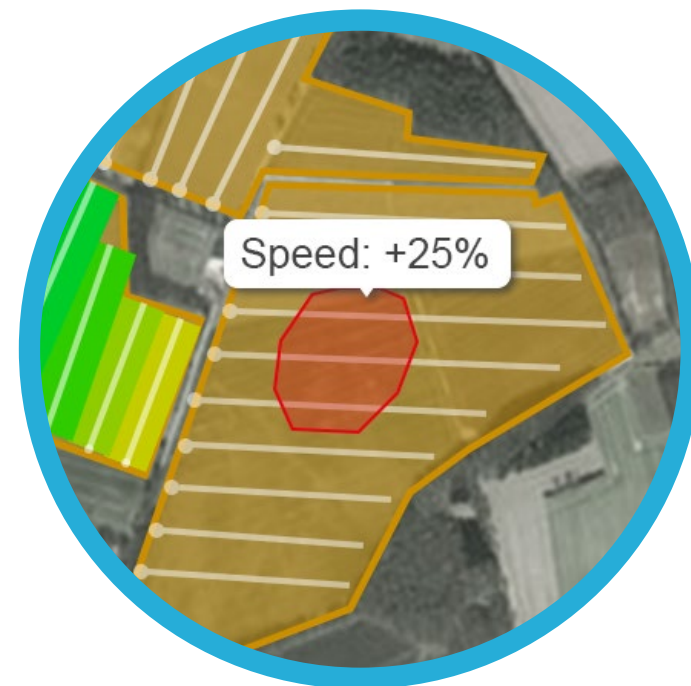
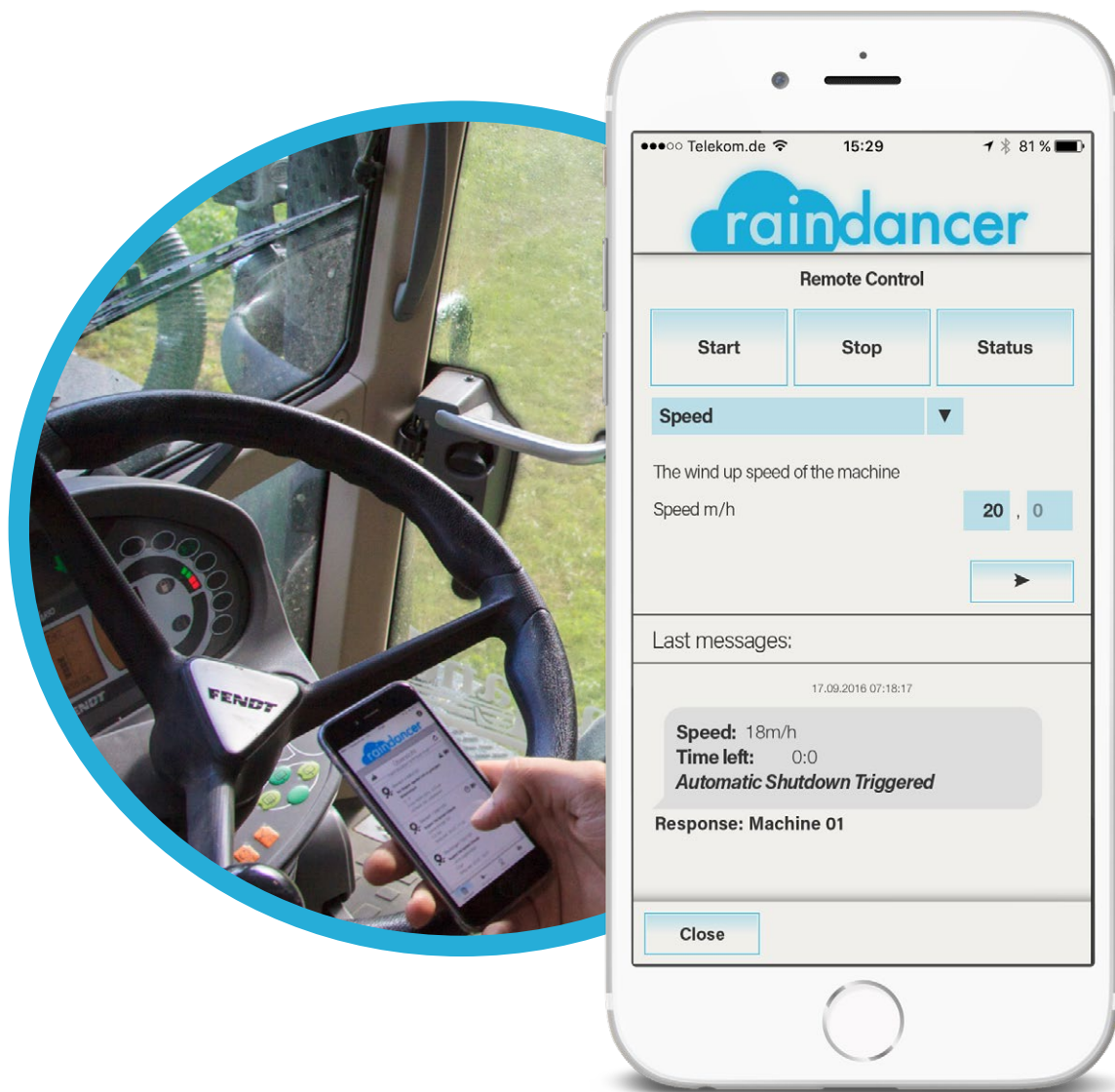
Entnahmestelle / Brunnen	Abrech- nungs Art	Benutzername	Schlag	Startzeit	Endzeit	mm	h	m³	m³ Zählerstand Start	m³ Zählerstand Ende	Entfern- ung Start
Brunnen 1	m3	Max Muster	Waldinsel	03.07.2015 16:27:59	04.07.2015 11:56:06	27,4	20	975	56773	57097	458
Brunnen 1	m3	Max Muster	Waldinsel	03.07.2015 16:28:26	04.07.2015 16:05:56	29,6	24	1180	57097	57421	517
Brunnen 1	m3	Max Muster	Waldinsel	04.07.2015 12:21:35	04.07.2015 23:10:07	25,7	11	540	57421	57745	256
Brunnen 1	m3	Max Muster	Waldinsel	04.07.2015 16:53:01	05.07.2015 12:59:36	29,3	20	1005	57745	58069	440
Brunnen 1	m3	Max Muster	Waldinsel	05.07.2015 05:02:44	06.07.2015 00:47:32	27,4	20	985	58069	58393	464
Brunnen 1	m3	Max Muster	Waldinsel	05.07.2015 13:45:12	06.07.2015 13:31:01	29,7	24	1190	58393	58717	521
Brunnen 1	m3	Max Muster	Waldinsel	06.07.2015 05:55:07	07.07.2015 00:58:08	27,4	19	955	58717	59041	448
Brunnen 1	m3	Max Muster	Waldinsel	06.07.2015 14:46:02	07.07.2015 14:13:54	30,1	24	1175	59041	59365	507
Brunnen 1	m3	Max Muster	Waldinsel	07.07.2015 05:08:48	08.07.2015 00:19:36	27,3	19	960	59365	59689	453
Brunnen 4	m3	Max Muster	Talrand	07.07.2015 16:07:12	08.07.2015 06:32:52	28,5	14	720	59689	60013	315
Brunnen 4	m3	Max Muster	Talrand	17.06.2015 05:08:11	17.06.2015 21:05:43	21,9	16	880	60013	60337	522
Brunnen 4	m3	Max Muster	Talrand	17.06.2015 05:08:30	17.06.2015 19:23:54	25,2	14	786	60337	60661	397
Brunnen 4	m3	Max Muster	Talrand	17.06.2015 05:08:50	17.06.2015 22:12:01	22,5	17	941	60661	60985	545
Brunnen 4	m3	Max Muster	Talrand	17.06.2015 19:24:16	18.06.2015 18:35:20	25,2	23	1276	60985	61309	668
Brunnen 4	m3	Max Muster	Talrand	17.06.2015 22:36:25	18.06.2015 16:30:26	22	18	984	61309	61633	584
Brunnen 4	m3	Max Muster	Talrand	17.06.2015 22:37:09	18.06.2015 13:33:31	22	15	820	61633	61957	482
Brunnen 4	m3	Max Muster	Talrand	18.06.2015 13:46:03	19.06.2015 00:04:42	21,3	10	566	61957	62281	333

Microsoft Excel®

Source: <http://products.office.com>

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- Start, Stop and Change the Machine's Speed



+ Variable Rate Irrigation | VRI

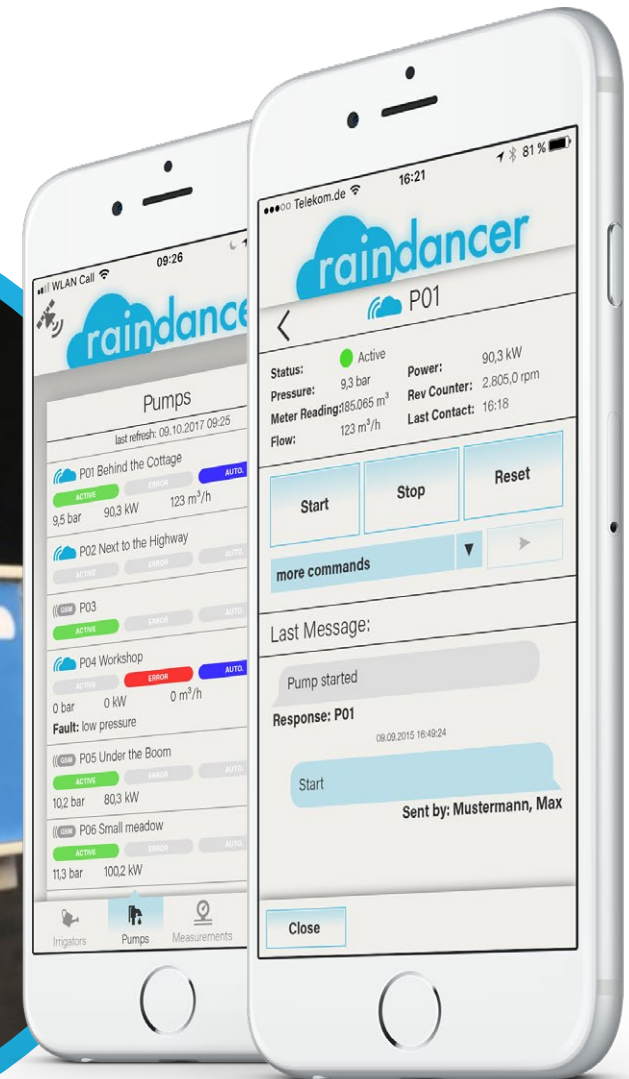
- Automatic Speed Adjustments Upon Entering / Leaving Certain Areas

Pump Remote Control



- Can Be Retrofitted to Most E-Pumps
- Communication via Internet
(3G/LTE Cellular or Existing LAN)
- Monitor Status in Realtime
(Flow, Meter Reading, Power, Pressure)
- Remote Control
(Start, Stop, Adjust Pressure)
- Notification about Malfunctions
- Working with Shared Pipelines

Optional: automatic regulation according to pressure requirements of the irrigator.



The raindancer Beacon should be installed by a professional technician. The available features depend on the conditions at the pump station. In most cases, existing GSM/SMS-based controls can also be integrated into the raindancer software.

1. Overview

Using your smartphone or pc, observe via lists or maps at any time and from anywhere: Where are your irrigators? When will they complete their current operation?

2. Malfunctions

When the irrigator stops moving or the water pressure falls below / exceeds a set range, a text message will be sent. A text message will also be sent when approaching critical areas, such as roads or railways near the edges of a field.

3. Relocation

All irrigation runs are displayed color graded, accompanied by detailed information, basis for scheduling future operations.

4. Remote Control

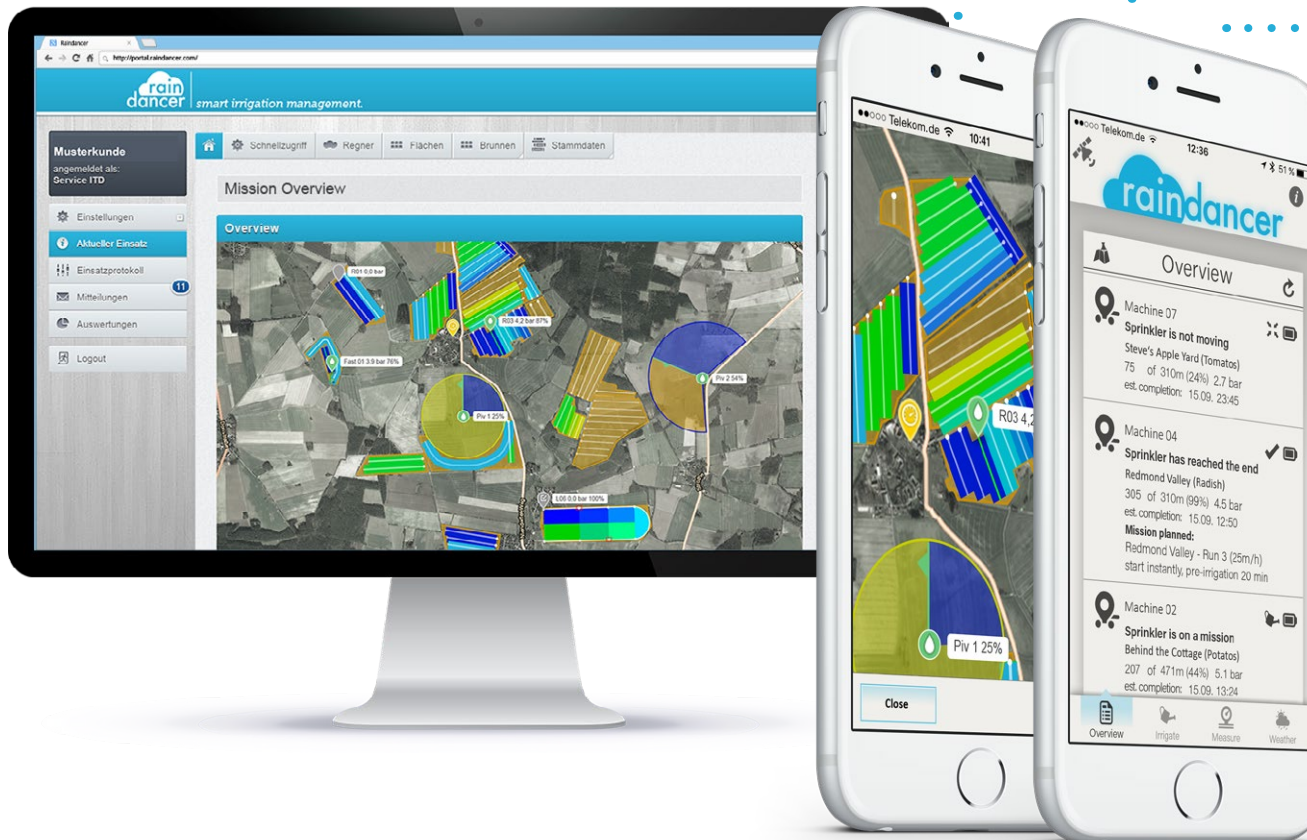
The irrigator can be started or stopped from anywhere. Will it begin to rain? Is it too hot? Just stop the running irrigation via your smartphone. The wind up speed is adjusted automatically, based upon configured soil composition.

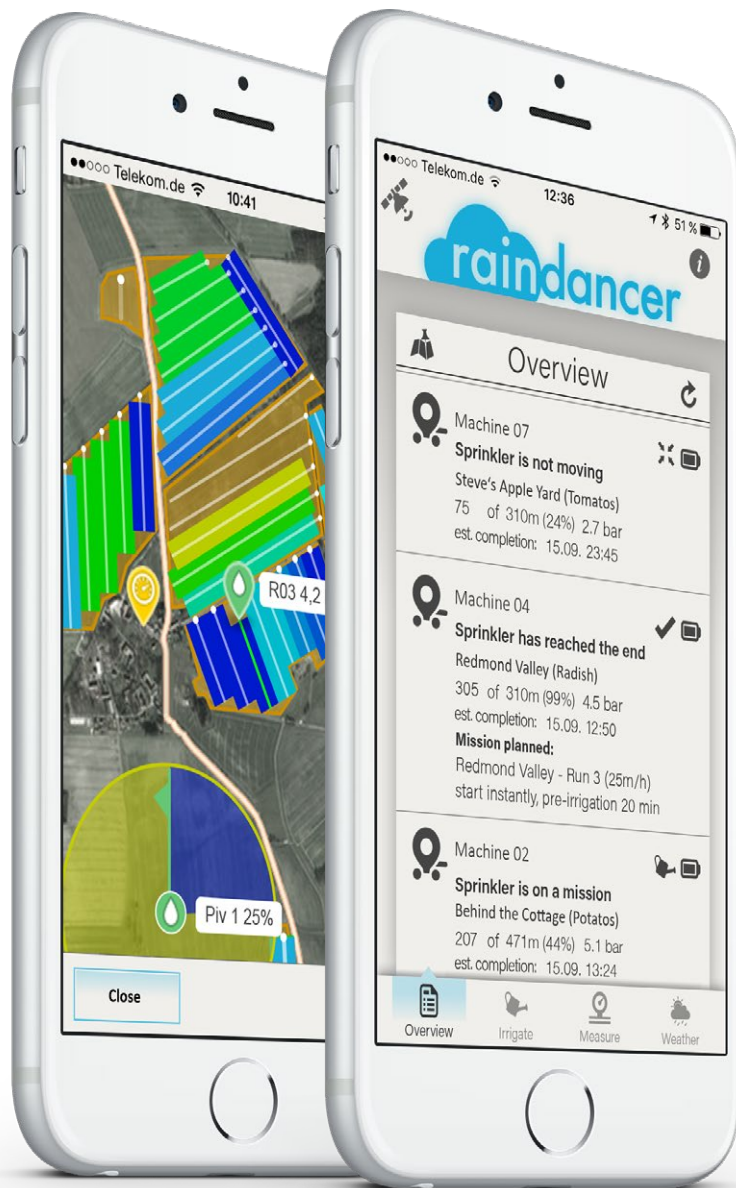
5. Pumps

Pumps can be started or stopped via smartphone. This can be performed automatically in an optimized manner in water supply networks!

6. Reports

All irrigation operations are logged automatically and are available permanently. As a report to authorities, the data can be exported to and processed in Microsoft Excel.





Increased free time and
fewer miles driven to check machines.

It is a pleasure to work with [raindancer](#).

Quote of a customer:

**„The first and the last I did every day
in summer:
I've thought of you.“**

If you like, we would be happy to get you in contact with
customers, to talk about their experiences using raindancer.

Arrange a non-obligation consultation today!

raindancer Module



- Position via GPS
- Pressure Sensor
- Tilt Sensor
- Data Transmission via Internet

Pressure Sensors

- Compact and Robust
Stainless Steel Housing
- Optional:
 - » Better Frost Resistance
 - » Ceramic Measuring Cell
 - » Pressure Resistant up to 75 Bar



raindancer PRO Module



- Temperature Sensor
- Water Meter
- raindancer
Sector Adjustment*
- Open Interface for
Additional Sensors

Water Meter

for connection to the
PRO module



Mounting Kit

for simple mounting
on the irrigator



raindancer Beacon



- Pump Control
- Remote Control
via Internet
- Monitoring
- If Applicable,
Automatic Control

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