

Agricultural technology extra

# MASCHINENRING

Magazin

## Krone Smart Connect Solar

More control when renting out machines

 **KRONE**



# MORE CONTROL WHEN RENTING OUT MACHINES

The SmartConnect Solar telemetry unit networks agricultural machinery independently of the manufacturer. Two machinery syndicates have tested the technology.

TEXT MAX WOCHINGER | PHOTOS MAX WOCHINGER, KRONE

**H**ow can older machines be integrated into a digital data management system without their own electronics and independently of the manufacturer? This is important for machinery syndicates and contractors. But so far, there have been no suitable modules for this according to many machinery syndicates. This has changed with the introduction of the self-sufficient "SmartConnect Solar" telemetry unit from KRONE: it can be easily

attached to the mower, tedder or rake, regardless of the application. The Kraichgau-Rhein-Neckar and Tuttlingen-Stockach machinery syndicates in Baden-Württemberg have tested the agricultural machinery technology.

### FIRST IMPRESSION

One is the Kraichgau-Rhein-Neckar machinery syndicate in Baden-Württemberg. It mounted the KRONE devices on its harrows

just a few weeks ago. "We are currently in the test phase," says Managing Director Thomas Mürschberger. And the first impression? "The technology works well. Counting the distance and hectares is accurate," he says.

His machinery syndicate has purchased the telemetry unit in order to record more precisely how much land is being farmed using the rented machines. "The vibration counter is relatively inaccurate – and that



*"The exact measurement will save us some discussions in the future."*

Thomas Mürschberger, Managing Director MR Kraichgau-Rhein-Neckar

may result in errors and discussions," explains Mürschberger.

There are always discussions with farmers that more may have to be paid than is actually necessary. They now want to have a concrete way of measuring the cultivated area.

### STATUS IN REAL TIME

With the telemetry unit, KRONE promises that the networking of all machines will no longer be a problem. The "SmartConnect Solar" is equipped with a solar panel and a rechargeable battery, enabling machines to be used "completely self-sufficiently" and "independently of the manufacturer or intended use", according to the agricultural machinery manufacturer. An integrated GPS receiver and a radio modem transmit position and status data in real time.

An acceleration sensor records the active time of a machine. "Thanks to intelligent energy management, the electronics are automatically switched to sleep mode if the machine is not moved for two minutes," says KRONE. A position sensor also enables the module

to be used as a load counter on a trailer flap. The sensor on the swivelling outrigger of a grubber is designed to detect the working and transport position. And with previously entered working widths, the telemetry unit can also be used as a hectare counter.

### AUTOMATIC DATA TRANSFER

"The myKRONE.green portal can be used to view and analyse machine data in real time and retrospectively. Reports can be exported as PDF files," says KRONE. The automatic data transfer of the digital vibrating timer saves the manual entry of areas and facilitates time recording during the season. In addition, the location of the machines can be called up at any time; this enables optimum deployment planning and minimises downtimes, says KRONE.

### SELF-SUFFICIENT ENERGY SUPPLY

The Tuttlingen-Stockach machinery syndicate near Lake Constance has been using the technology since April – for example on silage wagons, seed drills

and slurry tanks. "There have been no problems so far," reports Managing Director Volker Diener. He also talks about vibration counters which sometimes didn't work in the past. It was then difficult to check whether the farmer's information was correct, says Diener.

The new telemetry unit means that you always know where the rental machine is. "This also helps to protect against theft. That has already happened to us," says the MR Managing Director. He can now record the active hours and the area as well as the number of loads and unloads.

### MACHINERY SYNDICATE KRAICHGAU-RHEIN-NECKAR

Chairman: Markus Rupp | Managing Director: Thomas Mürschberger | Focus points: Rental machines, winter service, landscape maintenance | Number of members: 932  
www.mr-kraichgau.de

### MACHINERY SYNDICATE TUTTLINGEN-STOCKACH

Chairman: Bernd Moll | Managing Director: Volker Diener | Focal points: Biogas consulting, tyre & repair service, farm assistance, green waste recycling, winter service, rental machines | Number of members: 490  
www.mr-tut-sto.de



"I've already tried other things," says Diener, "a GPS tracker, for example. But it always had to be recharged and required a lot of maintenance." The KRONE telemetry unit is "top": the solar module charges it automatically and the technology is maintenance-free. "You don't actually have to do anything anymore."

### INTERFACE TO THE APP

His machinery syndicate uses an online rental portal to loan out a machine. After returning a machine, the farmer enters the number of operating hours into the app – and the machinery syndicate randomly checks the entries or if errors occur. What is still missing to prevent errors from occurring in the first place is a link to the rental portal, says Diener. "If there was an interface to the app, the farmer would no longer have to enter his hours at all. The recorded hours could then be billed automatically," he says. "That would be the icing on the cake."

Another point of criticism is the



*"I can record the active hours and the area as well as the number of loads and unloads."*

Volker Diener, Managing Director MR Tuttlingen-Stockach

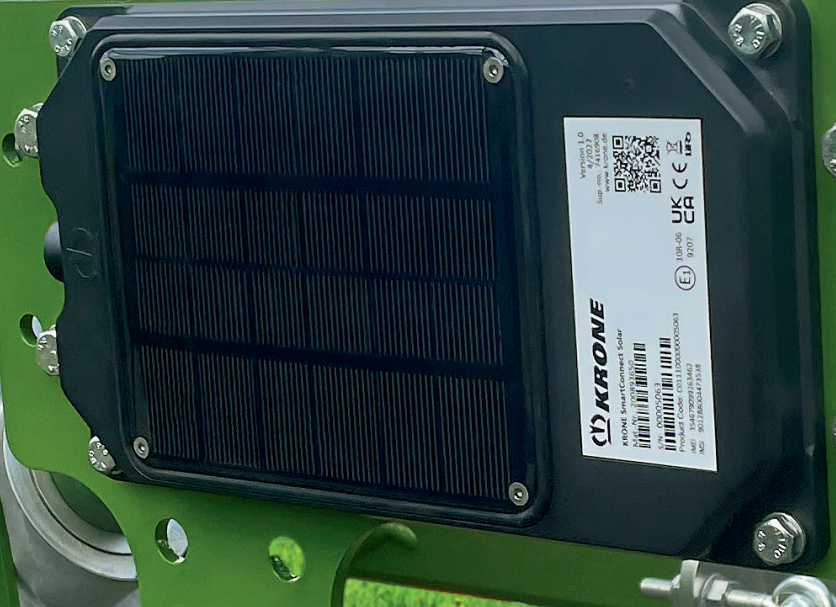
installation of the devices on the machines: this was not that easy, says MR Managing Director Mürschberger. "The mounting kit does not fit all agricultural devices." But with "a bit of drilling and screwing", the farmers from the machinery syndicate were able to make it work. "It just took a little longer."

Despite the lack of an app connection and the fact that installation is not easy: for the two MR managing directors, there is currently nothing better on the market than the technology from KRONE. "I can only recommend this to the other syndicates," says Volker Diener. And Thomas Mürschberger also wants to purchase further modules for the other machines. "The exact measurement will save us some discussions in the future."



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KRONE  
SmartConnect Solar

## KSC Solar – independent, flexible and self-sufficient

**KRONE SmartConnect Solar** lets you network all your machines in real time. The self-sufficient telemetry unit automatically records the location, route and working times and can also be used as a hectare and load counter. Thanks to the solar panel and rechargeable battery, the telemetry unit **works independently and across manufacturers – with no running costs.**



 **KRONE**