

Security Camera Designed For Remote Locations

Remote farm and building locations are often targets for thieves. Lack of Wi-Fi makes it difficult to monitor these areas with cameras or other sensors. Tactacam designed the Defend camera system for remote security.

The motion-sensitive camera has its own battery and can be charged via an add-on solar panel. Using a cellular signal, it can send images to a smartphone app in a very short time from when it detects movement in its field of view.

The ideal placement of the camera is 60 to 70 ft. from the monitored area. Safe for outdoor use, it can be mounted almost anywhere. It can detect movement up to 100 ft. away.

Plans are offered as monthly or annual subscriptions. The Starter plan includes 250 images and three live view sessions each month. The Pro plan offers unlimited images and five live view sessions per month, while the Premium plan provides unlimited images and live views. Data plans start as low as \$5 per month, with no activation fees, and the camera doesn't need to be added to any existing cellular plans.

The retail price of the camera is \$150. A rechargeable battery costs \$50, and a solar panel can be added for an additional \$60. Defend cameras can be purchased from Bass



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Pro Shops, Cabela's and online directly from Tactacam.

The 4K camera captures photos and video and works with most major cellular networks. It features 8 GB of internal storage, with an optional SD card slot for up to 32 GB of additional storage. Without the optional rechargeable battery, it requires 12 AA batteries.

Contact: FARM SHOW Followup, Tactacam, 1668 Jordan West Rd., Decorah, Iowa 52101 (ph 218-282-5650; support@tactacam.com; www.defendcellcam.com).



"The e2T can handle all the Tilmor tools, BCS attachments or pull trailers, compost spreaders and more," says Heckerroth.

Two-Wheel Electric Tractor Does It All

Renewables' e2T two-wheel tractor with remote control isn't like other walk-behinds. It has all the benefits of a walk behind without the negatives, according to company founder Steve Heckerroth.

"The e2T eliminates about 80% of the dozen or more control levers on a diesel two-wheel tractor," he says. "It also eliminates the vibration, and it doesn't require the upper body strength needed to turn and control a two-wheel diesel."

The e2T has a lot more than just remote control. While the basic unit is intended for draft purposes, the 10 receiver hitches in various locations offer a wide range of options. A third motor with a PTO shaft can slip into two receiver hitches for front or rear attachments. It provides instant power with full torque from zero to 1,200 rpm. Lift for attachments is supplied by electric actuators.

The receiver hitches can also be used to host a seat option in the rear, top or forward position. In the forward position, Heckerroth says it's ideal for picking produce in the field with carriers for containers on either side.

Receiver hitches can also be used for a wide variety of attachments.

"The e2T can handle all the Tilmor tools, BCS attachments or pull trailers, compost spreaders and more," says Heckerroth. "The receiver hitches can handle up to 1,000 lbs. They make it easy to use the e2T for

everything from planting and transplanting to pulling implements and harvest, anything you can think of."

He's used it with a 60-in. sickle bar, mowing an acre in 2 1/2 hrs. He's also tested it out with a reaper to cut and windrow.

Regenerative braking is active at three levels: simply reducing the speed, braking and machine action. If in use with a tiller, the tiller pulls/pushes the e2T through the field, and the wheel motors return power to the battery.

Throughout, Heckerroth has aimed for simplicity, versatility and economy. A graph on the company website compares it favorably with alternatives. The current 5 kWh battery configuration, with separate 3-hp motors on each wheel for draft operations, is priced at \$7,500.

Options include dual wheels (\$400), a 10-hp PTO compatible with walk-behind power implements (\$1,900), seats (\$300), a 550W PV shade canopy (\$1,200), a 2000W inverter for mobile AC power (\$1,200), and a 15 kWh LFP exchangeable battery (\$2,400).

Heckerroth projects sales of 40 tractors this year and 500 in 2026. He expects to reach an output of 10,000 by 2030. While such growth is aggressive for a start-up, Heckerroth has a formidable history with electric tractors. He used a BCS two-wheeler on his homestead in the 1970s and became a BCS dealer. He



Reaper attachments are equipped with three 5/8-in. AR400, non-welded, bidirectional blades for quick and easy field change-out.

Attachments Make Light Work Of Heavy Brush

IronCraft LLC recently introduced a range of skid steer attachable brush cutters labeled as X-Treme Tree Reapers. They're designed for land reclamation, cutting right-of-ways, fire lanes and on-farm pasture clearing.

The heavy-duty Reapers are available with cutting widths from 60 to 78 in. and feature a choice of two direct-drive motor options, including a 16 to 26 gpm gear motor (case drain not required) or a 17 to 30 gpm bent-axis piston motor (case drain required).

The various-sized Reaper attachments are equipped with three 5/8-in. AR400, non-welded, bidirectional blades for quick and easy field change-out. Machine models weigh from 1,300 to slightly over 1,400 lbs. and slice up dense brush, saplings, limbs and trees from 5 to 7 in. in diameter.

"You can rely on the Reaper's raw strength without the restriction of a gearbox to tackle any land-clearing project with ease," says an

IronCraft spokesperson.

The X-Treme Tree Reaper is designed with bolt-on, replaceable skid shoes and a tapered deck for lower ground cutting. Options include a front-mounted grill and mulching teeth to deliver a smoother surface finish.

"Our Skid Steer X-Treme Tree Reapers are built for professionals who need a powerful, durable and precise land-clearing solution. They're designed to handle the toughest jobs with unmatched cutting strength and precision and transform land clearing into a faster, more effective process, ensuring every job is completed with ease and confidence."

Interested customers are encouraged to contact their nearest IronCraft dealer for pricing and availability.

Contact: FARM SHOW Followup, IronCraft, 7 Rocky Mt. Rd., Athens, Tenn. 37303 (ph 423-405-5150; sales@ironcraftco.com; www.ironcraftusa.com).

repaired them for himself and others for about 20 years. During the same period, he was converting cars to electric and working with solar power. In 1992, the multiple interests merged.

At the time, he was building lightweight electric cars from kits. He realized tractors were ideal conversions, given the need for weight that batteries could supply.

He founded Electrac, custom-building 4-WD, battery-powered tractors, and consulted with a Japanese company in 1997 to design a tractor specifically for clearing landmines after wars. His prototypes utilized steer-by-wire technology, zero-radius turning, remote control operations, wheel motors, and onboard inverters/chargers for mobile AC power.

He also worked with the use of solar charging shade canopies and using implement-mounted motors to replace PTOs, improving safety and efficiency. The prototypes were also the first to use linear actuators on a full-function electric tractor. Many of these features are now integrated into the e2T.

In the early 2000s, he designed thin-film solar roofing products while continuing to experiment with electric tractor design. (Vol. 26, No. 4). In 2012, he founded Solelectrac (Vol. 44, No. 2). After nearly 10 years of research, awards and growth, the company was acquired by a major investor.

He returned to his earlier focus on an electric two-wheel tractor.

"I built a prototype designed to be

affordable," says Heckerroth. "It had 20 in. of clearance, a wheel track of 40 in. and a motor on each wheel for zero radius steering."

He found that handlebars tended to jump up and down enough that it was hard to control the throttle, so he opted for remote control.

"Remote control added \$60 to the cost, but eliminating the handlebars cut the cost by \$300," says Heckerroth. "It made sense from affordability and function, and I could see what I was doing."

It took Heckerroth about six months to perfect. He's now in his final pre-production stage with four working prototypes. He does two or three on-farm demonstrations a week, looking for weak spots in the design.

"For the last six months, we've been testing the e2T in real-life conditions," says Heckerroth. "Lately, it's been working perfectly."

He reports rave reviews from operators, especially women frustrated with the difficulty of handlebars, maintenance expenses and getting burned by the hot engine. He points to a host of testimonials on Renewables' Instagram page.

"One told me that the e2T is her retirement package. 'With the remote control, I can continue to farm into old age,' she said," reports Heckerroth.

Contact: FARM SHOW Followup, Steve Heckerroth, Renewables Inc., 3663 Regional Pkwy., Santa Rosa, Calif. 95403 (ph 707-235-8509; info@renewables.com; www.renewables.com).



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