Ruffy Controls Introduces World's Smallest Low-Power Industrial Joystick — The TS3 Series

Introducing the Worlds Smallest Low Power Joystick from Ruffy Controls. Smaller and Better, their TS3 Series is an Industrial Joystick for UAVs and More.

CARLSBAD, CA, UNITED STATES, October 31, 2025 /EINPresswire.com/ -- Ruffy Controls, Inc. (www.ruffycontrols.com), a leader in precision input devices and motion-control solutions, today announced the launch of its new TS3 Series Micro Low-Power Hall Effect Joystick, designed for demanding industrial, battery-powered, and unmanned applications. The TS3 sets a new benchmark for small joysticks for size, power-efficiency and durability in joystick technology.

> We are thrilled to bring the TS3 Series to market. Our customers have asked for a joystick that combines ultra-small form factor, ultra-low power consumption and industrial robustness. TS3 Delivers."
>
> *Scott Meyers*

Key Highlights of the TS3 Series

The TS3 Series offers a remarkably compact package for a small low-power joystick:

- measuring just approximately 14 mm × 12 mm above panel (about 0.81" × 0.55"), making it one of the smallest industrial-grade joysticks available.
- It operates at a low supply voltage of 3.3 VDC, delivering energy-efficient performance ideal for battery-powered systems (e.g., UAVs, UGVs).
- Built around Hall effect sensor technology (non-contact sensing) — offering durability and high reliability.
- Above-panel sealing to IP67 for environmental protection, making it suited for harsh conditions and industrial usage.
- Rated for 2.5 million lifecycles, ensuring longevity in demanding applications.

- Operating temperature range from –40 °C to +85 °C (storage to +125 °C) and EMC/ESD performance meeting industrial standards.
- Mounting via M8 × 1 mm threaded body, enabling above-panel installation for streamlined integration.
- SPI digital output interface (8-bit resolution, –128 to +127) giving precise proportional control and easy integration into embedded systems.

Worlds Smallest Low Power Joystick

"We are thrilled to bring the TS3 Series to market," said Scott Meyers, CEO of Ruffy Controls. "Our customers in unmanned systems, medical instrumentation, industrial automation and beyond have been asking for a joystick that combines ultra-small form factor, ultra-low power consumption and industrial robustness. With the TS3, we're delivering exactly that—enabling new applications, lighter weight systems and longer battery life without sacrificing performance or durability. This is a significant step forward for our input-device portfolio and our customers' product capabilities."

Applications & Markets
The TS3 Series, the worlds smallest joystick is ideally suited for:

UAV (unmanned aerial vehicle) and UGV (unmanned ground vehicle) remote controls where size, weight and power consumption are critical.
Industrial control panels and compact human-machine interface (HMI) systems that must meet rugged-environment standards.
Medical and portable instrumentation requiring precise analog or digital joystick input in a compact footprint.
Mobile battery-powered equipment where long runtime and minimal standby current (sleep mode ~150 µA) are essential.

Availability & Ordering
The TS3 Series is now available for order through Ruffy Controls. For full specification sheet, configurator details and pricing, please visit https://ruffycontrols.com/product/ts3-series/. Look for the green specification button on the lower right.
or contact sales@ruffycontrols.com
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About Ruffy Controls
Ruffy Controls, Inc., headquartered in Carlsbad, California, is a specialty designer and manufacturer of high-precision input devices including joysticks, trackballs and other motion-control interface elements. With a focus on rugged industrial, medical and unmanned-systems markets, Ruffy delivers solutions engineered for longevity, repeatability and challenging environments.

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