

# Harxon Launches Smart eRadio Solution for RTK Applications



Harxon has introduced the smart eRadio from its radio modem series, a long-range and power-efficient solution designed to support high-precision GNSS RTK applications in surveying and precision agriculture. Harxon eRadio is enabled with intelligent serial baud rate identification for different RTK devices. It can automatically identify RTK serial baud rate with a radio data cable and is available in a plug-and-play form for easy connection between the eRadio and RTK. Due to the high transmitting power from 5W to 35W, transmission data can be up to 19,200bps/s over a connection distance of between 50 and 80 kilometres, depending on the environment.

The [eRadio](#) offers surveyors an easy-to-use radio modem that provides dependable performance as either a base or a repeater working with other Harxon radio modems in challenging environments. In the store and forward-operating mode, eRadio receives messages, buffers the received data and then transmits it to another substation.

The user-programmable eRadio also supports Bluetooth to configure data and updates radio status. Its diagnostic reporting software can realise the built-in reliability monitoring, such as internal temperature, environment status, battery level and channel inspection, etc. These features allow users to both anticipate and deal with potential issues efficiently.

## Algorithms

In addition to being compatible with radio protocols by Trimble and Satel, the eRadio is also equipped with the unique ETALK communication protocol, which uses Harxon's exclusive algorithms and advanced processors. Under the same conditions, the ETALK protocol can significantly reduce the BER of weak signals and the communication distance can be increased by 20%.

The compact, rugged eRadio is particularly well suited for heavy-duty outdoor use. It is designed for easy mobile use in demanding field conditions with its OLED display screen. The IP67 full-metal cover provides dust and water resistance that keeps surveyors working with confidence and efficiency.