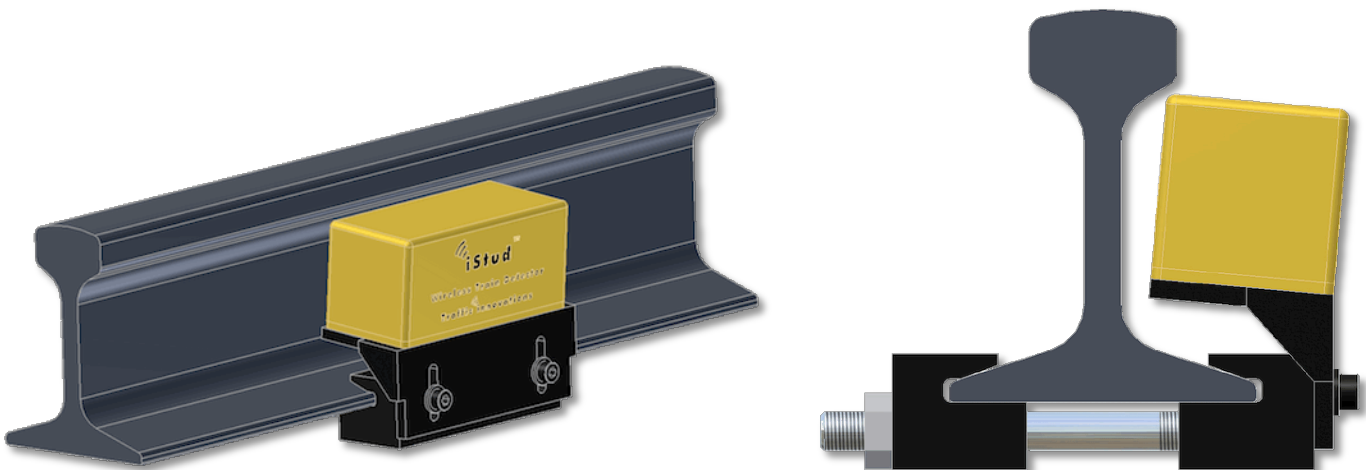


Wireless Train Detector Stud

The iStud WTD-24 Wireless Train detector uses trackside mounted magnetic and vibration sensors to detect the presence of trains. The WTD-24 sensor is wireless, transmitting detection and status data in real time via low power radio technology to a nearby **Wireless Access Point (WAP-24)** that collects and relays the data.

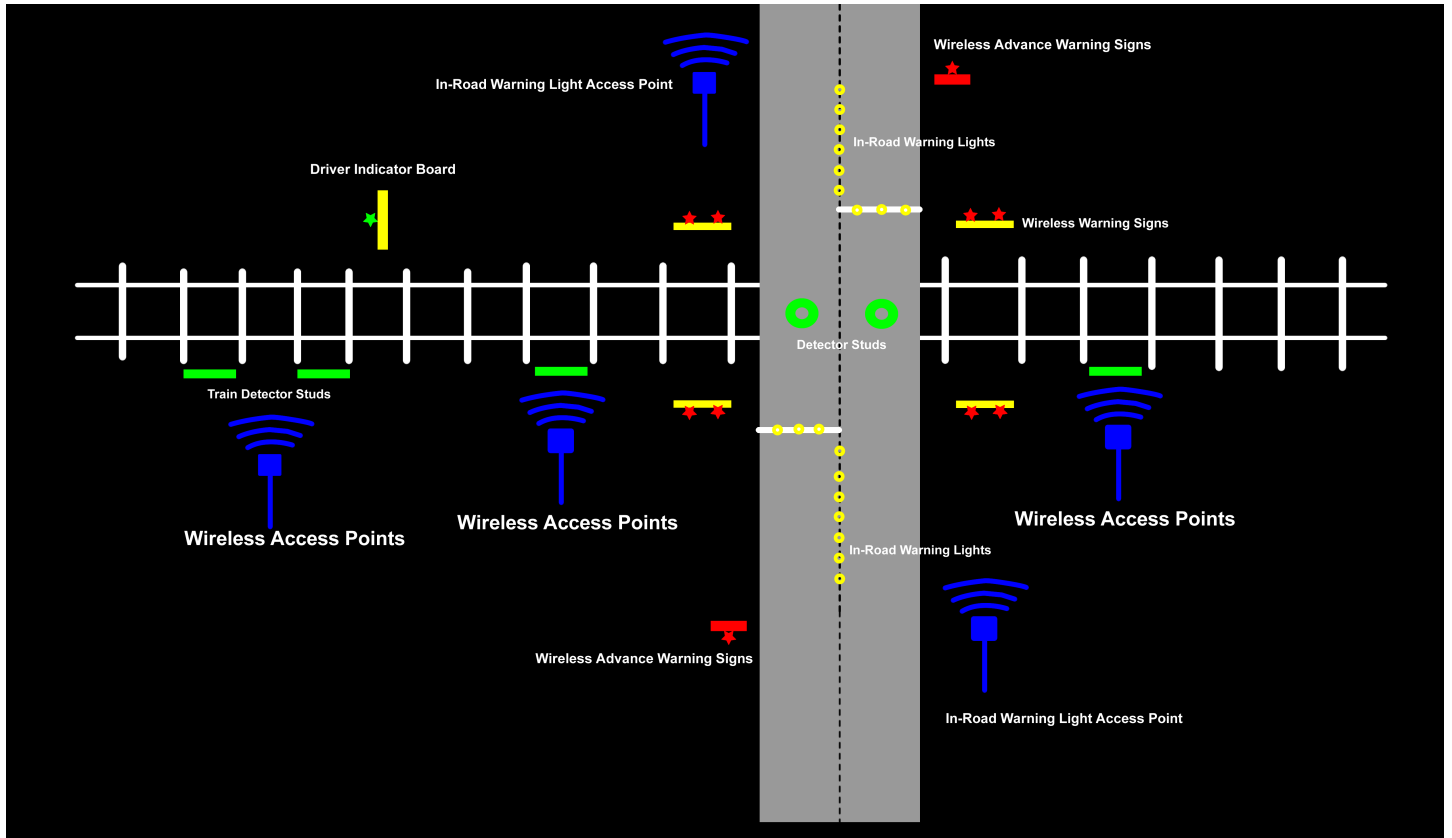
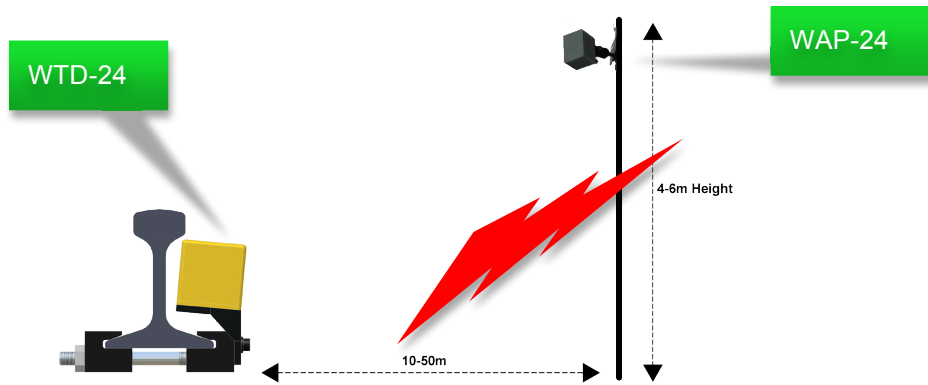
The iStud Wireless Train detector simplifies installation of trackside train detectors by eliminating cabling and trenching, significantly reducing installation and maintenance costs. The sensor is fixed to the rail using an adjustable rail claw. The detector has a minimum operational life of 10 years. Once the internal batteries are depleted the detector is replaced. The detector determines its health status by measuring temperature, battery voltage and radio link quality. The detector is remotely configured and monitored via a HTML WEB interface. The detectors are in constant contact with the local Wireless Access Point (WAP). Loss of communications will result in an alarm message and activation of programmable outputs signals.



Detector Studs

The detectors can automatically change radio channel if interference is detected and the wireless protocol guarantees delivery of detection and status information while maintaining very low power consumption and detection latency.

Installing two detectors on one track allows direction and train speed to be determined. Each detector has a unique network ID. Up to 16 detectors can be installed off the same Wireless Access Point. The wireless access point can also be connected to a Wireless Repeater, which can extend the link range by 1000m.



Dimensions Height Width Depth	70mm 200mm 70mm	RF Frequency Band	2400 to 2450 MHz (ISM unlicensed Band)
Weight		RF Frequency Channels	16
Protection Class	IP68	Output Power	Nominal 25mW EIRP
Mounting	Universal mounting with adjustable rail claw for all common rail profiles	Communication Range	Line of site, up to 50m to Wireless Access Point
Ambient Operating Conditions	-55 °C to +85 °C Humidity Up to 100 %	Modulation	MSK, Frequency hopping
Traversing Speed	0 km/h (static) to 500 km/h	Transmit/Receive Bit Rate	250Kbps
Operating Life	10 Years	Compliance	EMC, ACA
Power Source	Non replaceable primary Li-SOCI, 3.6V 40A/Hr battery pack	Applications	Ideal for remote installations with no power. Low Cost Train Detection. Low Cost Rail Level Crossing Protection Systems. Axel Counting. Replace hard-wired train detection systems.
Detection Technique	3-axis magnetic field sensing 3-axis vibration sensing Self calibrating detection algorithm with adjustable sensitivity settings	Firmware	Upgradable via wireless link
Sensor Sampling Rate	50-400 Hz		

Traffic innovations

ABN 58 127 391 593
Unit 2, 26 Leighton Pl,
Hornsby 2077 NSW Australia
Tel +61--2 9476 0185
www.trafficinnovations.com.au
sales@trafficinnovations.com.au

Local Distributor

The Civic Group, Unit 74, Block 503,
Greenogue Business Park, Rathcoole, Co Dublin.
Phone: +353 1 4019914 | Fax: +353 1 4019140
Email: info@civic.ie | Web: www.civic.ie