

WIRELESS E-STOP

Datasheet

FORT
Foundation Series



Stop Machines from a Safe Distance

- ✓ Easy integration
- ✓ Advanced safety
- ✓ Long range
- ✓ Flexible pairing

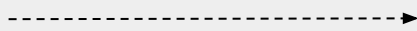
Safety in the Palm of Your Hand

Prevent accidents and protect your team with FORT's Wireless E-Stop (WES.) The handheld emergency stop button shuts down one or more machines with the push of a button. Designed to meet industry safety standards, the Wireless E-Stop uses a patented communication protocol for maximum reliability. Reduce risk and increase productivity by ensuring that worksite safety is always within reach.

Prevent Accidents and Downtime for Any Application



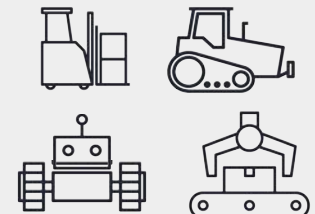
Wireless E-Stops can be carried, worn on a belt, or stationed around your worksite.



Handset sends constant heartbeat signal to receiver.



FORT Vehicle Safety Controller receiver wires into machine e-stop circuit.



Ideal for heavy equipment, industrial machinery, R&D, and more.

WIRELESS E-STOP FEATURES

Reliable Communication

FORT's patented wireless technology is designed for safety and dependability. The handset sends constant heartbeat signals to receiver. An e-stop command is triggered if the connection is lost for any reason.

Easy Integration

FORT's [Vehicle Safety Controller](#) receiver wires into any e-stop circuit. Bolt-on and embedded options available.

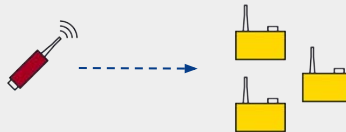
Flexible Pairing

Easily pair devices using FORT's drag-and-drop configuration tool for Windows and Linux. Combine devices for multipoint configurations:



One to One

Stop a single machine with one handset.



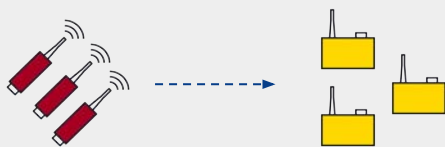
One to Many

Stop multiple machines with one handset.



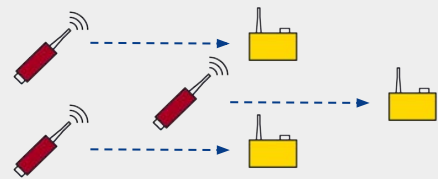
Many to One

Stop one machine from multiple handsets.



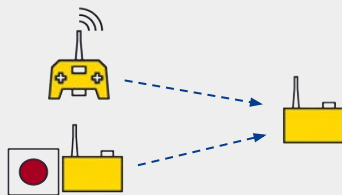
Many to Many

Combine multiple senders and receivers.



Co-located Pairs

Use multiple device sets in the same space.



Combine with Other Foundation Series Devices

FORT's Wireless E-Stop, Vehicle Safety Controller, and Safe Remote Control can be combined in multipoint configurations.

Radio Options

900 MHz:

Line of sight range up to 2km.
Combine up to 12 or more devices per configuration.*

2.4GHz:

Line of sight range up to 200m.
Combine up to 3 devices per configuration.

**Exact limit determined by customer safety analysis.*

WIRELESS E-STOP DETAILS



Illuminated E-Stop button. LED indicates connection and signal strength.

IP65 enclosure



Antenna connector

Mini USB-B charging port with cover

Power button with LED light indicates fully charged, 20%, and 10% battery levels.



Receiver: Vehicle Safety Controller

For technical details and more information on FORT's Vehicle Safety Controller, please visit the [FORT website](#) or download the [datasheet here](#).

WIRELESS E-STOP TECHNICAL SPECIFICATIONS

Part Numbers	WES-001-2401	WES-001-901	WES-001-903
Device Form Factor	Handheld wireless emergency stop with belt clip		
Dimensions (no antenna)	163mm x 47mm x 47mm (6.4" x 1.95" x 1.95")		
Base Unit Weight	310 g (0.68 lbs)		
Operating Temperature	-20°C to 60°C (-4°F to 140°F)		
Charging Temperature	Charges at 0°C to 45°C (32°F to 113°F)		
Charging Voltage	5V DC @ 2A (USB)		
Battery Type	Lithium Ion, 10.4 Watt Hours		
Battery Life	Up to 12 hours; Operates while charging		
Connectors	Mini USB-B		
Inputs	1 dual channel e-stop switch		
Ruggedness	Designed to meet MIL-STD-810		
Ingress Protection	IP65		
Safety	E-Stop functionality designed to meet SIL 2 (per IEC 61508) and Cat 3, PLd (per ISO 13849)		
Safety Timeout Period	Configured by user <i>Default TX Rate: 35 ms; Default RX Timeout: 332 ms (includes latency)</i>		
Regulatory	Radio modules FCC & IC compliant (US & Canada)		
Receiver	FORT Vehicle Safety Controller (VSC) receiver (mounted or embedded versions available)		
Multipoint Pairing Options	Pair 1 or more Wireless E-Stops with one or more receivers 900 MHz: Number of devices depends on customer safety analysis and timeout requirements (typically up to 12 per system.) 2.4GHz: Up to 3 devices per system		
Pairing Interface	FORT configuration tool for Linux and Windows		
ISM Radio Options	2.4 GHz	902-928 MHz (US, Canada)	915-928 MHz (Australia, New Zealand)
Maximum Wireless Range <i>May vary based on antenna placement and environment</i>	200m Line of sight	2 km Line of sight	2 km Line of sight
Output Radio Transmission Power	20-30dBm <i>Be sure to follow all local RF communication regulations while operating.</i>		

WIRELESS E-STOP PART NUMBERS & ACCESSORIES

Wireless E-Stop Handsets (Wrist strap and belt clip included)	
Wireless E-Stop with 2.4GHz radio	WES-001-2401
Wireless E-Stop with 902-928 MHz radio <i>for US and Canada</i>	WES-001-901
Safe Remote Control Handset with 915-928 MHz radio <i>for Australia and New Zealand</i>	WES-001-903
Starter Kits: Bundles including all recommended accessories	
Starter Kit Accessory Bundle for WES-001-2401 <i>Includes all of the following:</i> USB Cable Type A to mini-B, 3ft USB Power Type A connector, 10W 2.4 GHz antenna, RP-SMA male	100-0141 100-0029 270-0004 275-0003
Starter Kit Accessory Bundle for WES-001-901 and 903 <i>Includes all of the following:</i> USB Cable Type A to mini-B, 3ft USB Power Type A connector, 10W 750-950 MHz antenna, RP-SMA male	100-0140 100-0029 270-0004 275-0002
Individual Accessories	
USB Cable Type A to mini-B, 3ft	100-0029
USB Cable, Type A to mini-B, 6ft	250-0160
USB Power Type A connector, 10W	270-0004
750-950 MHz antenna, RP-SMA male	275-0002
2.4 GHz antenna, RP-SMA male	275-0003

FORT ROBOTICS CONTROL PLATFORM

Pro Series



Safe Remote Control Pro



Endpoint Controller



FORT Manager



Nano Safety Controller Pro



Wireless E-Stop Pro

Foundation Series



Safe Remote Control



Vehicle Safety Controller



Wireless E-Stop



Wired Remote Control

Professional Services



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