# **SafeStop™**

# Wireless Emergency Stop System



## **Description**

The SafeStop™ system provides the ability to safely command an unmanned or autonomous vehicle to pause or stop from a remote location up to 6 miles away. The SafeStop™ is a multi-level wireless emergency stop system, consisting of transmitter and receiver. The compact and lightweight transmitter contains an internal rechargeable battery that enables continuous operation for up to 12 hours. The SafeStop™ transmitter is available in both OEM and handheld models. SafeStop™ also contains an integrated Watchdog Timer. This automatically engages the SafeStop™ if a message hasn't been received within a configurable set amount of time.

#### Wireless Performance

**Operating Distance with Single Transmitter:** Up to 6 miles (line of sight)

Update Rate: 20 HZ

**Total Number of Combined** 

Transmitters: 10

#### Wireless Link

**Frequency Band:** 902-928MHz (other frequencies

available)

Transmit Power: 1W Modulation: FHSS GFSK FCC Approved: Yes

## **Transmitter Electrical**

SS03TX Battery Life: Up to 12

hours

SS03TX Input Voltage (charging): 12/24 VDC, ±10% SS03TX Power Consumption

(12 VDC): 15W

#### **OEM Transmitter Electrical**

SS03OT Input Voltage (V<sub>IN</sub>): 10-32 VDC SS03OT Power Consumption (12 VDC): 2.5W

#### **Receiver Electrical**

SS03RX Input Voltage (V<sub>IN</sub>): 10-40 VDC

SS03RX Power Consumption (12 VDC): 8W (typical); max

power dependent on output load

# **Frequency Options with Ranges**

**400MHz:** 340-400MHz **900MHz:** 902-928MHz **1.3GHz:** 1.33-1.54GHz **2.4GHz:** 2.400-2.4835GHz

## Weight

SafeStop 03TX: 555g SafeStop 03RX: 1052g SafeStop 03OT: 71g

SafeStop 03RX Cables: 203g

## Vehicle Interface/Output Ratings

Digital Communications: TCP/IP over Ethernet (serial

optionally available)

Emergency Stop Output Rating: 1.5A Continuous (sink or

source)

Emergency Override Output Rating: 1.5A Continuous (sink

or source)

Emergency Stop Output Minimum Voltage:  $V_{IN}-2.4V$  Emergency Override Output Minimum Voltage:  $V_{IN}-2.4V$ 

## **User Interface**

User Settings: Web browser

configuration interface

Stop Input: Standard mushroom-

type stop button

Pause Input: Guarded toggle

switch

Bypass Mode: Momentary push-

button sequence

Visual Indicators: Bicolor LEDs for

Power, Link, Pause, & Stop

Audible Alarm: Tone emitted for

link lost & low battery

#### **Environmental**

**Dust/Water Resistance:** Receiver: IP67; Transmitter: IP64

Operational Temperature: -20°C to 70°C

Operational Humidity: 10% to 90%, non-condensing

**Operational Shock Rating: 15g** 













# **OEM TRANSMITTER AND SAFESTOP™ ACCESSORIES**



OEM TRANSMITTER (\$\$03-OT04, \$\$03-OT09, \$\$03-OT13, or \$\$\$503-OT24)



EXTERNAL EMERGENCY STOP BUTTON (SS03-A001)



EXTERNAL EMERGENCY OVERRIDE BUTTON (SS03-A002)



12V DC CAR CHARGER (SS03-A003)



EXTERNAL ANTENNA (ANT0302, ANT0902, ANT1302, or ANT2402)



STANDARD POWER & SERIAL INTERFACE CABLE (SS03-A005)



AC CHARGER (SS03-ACC)



# **QUICK START/TYPICAL APPLICATION**





