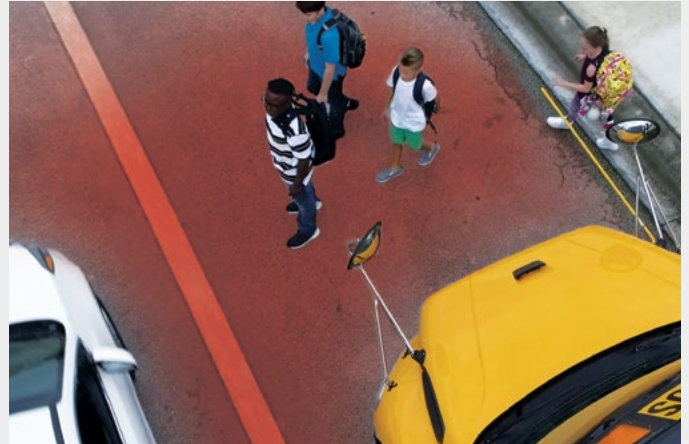


# Predictive Stop Arm®

Increase safety where students are at most risk

Further increase safety in the Danger Zone through proactive warnings to students and operators inside and outside the bus.

Using patents-pending radar and predictive analytics technologies, the Predictive Stop Arm (PSA) monitors approaching vehicle traffic for probable stop arm violations and actively notifies students that it may not be safe to cross.



## ■ A.I. and Predictive Technology

Special algorithms are used to predict whether approaching vehicles have sufficient time to slow down and stop before reaching the bus.

## ■ Reduces Operator Distraction

The system makes use of artificial intelligence to help reduce false alerts, enabling the operator to increase focus on the task at hand.

## ■ Automatic System Engagement

The system is normally not active while the bus is driving. The system automatically becomes active when the bus is stationary, the flashers are on, the stop arm is deployed, the bus door is open.

### Accessories:



Display Module



Radar Modules



Safety Alert  
Module (SAM)



External Speaker Options



GPS Receiver

### Optional Add-ons:



#### Right-Hand Danger Zone

The solution detects people and their movement within a definable right-hand danger zone area.

# Predictive Stop Arm®

Increase safety where students are at most risk



Display Module onboard bus indicating it is safe to cross

System	
Operating Voltage	8 VDC to 32 VDC
Activation and De-Activation	Automatic (bus door signal, stop arm signal, ambers/reds signals)
Storage Temperature	-50°C to 80°C
Self-Diagnostics	Automatic on boot up
Controller	
Input Voltage	0VDC to 32VDC
Input Port Active High Threshold	5VDC
Input Port Impedance	30KΩ
Output Voltage	12 VDC to 13 VDC
Output Current	150mA
Enclosure	Steel, powder-coated
Operating Temperature	-30°C to 50°C
Heater and Fan	Equipped and automatically activated
Access	Wi-Fi or Ethernet
Security	Password control
Output Port Impedance	6Ω when sink
Display Module	
Operating Voltage	10VDC to 16VDC
Input Current	200mA max
Enclosure	ABS
Compliant Standards	SAE J1455, SAE J113-11, IP21
Input Polarity Protection	Yes

Radar	
Type	24GHz Doppler (24.075 GHz to 24.175 GHz)
Detection Range	300m (984 ft)
Input Voltage Range	8VDC to 18VDC (14 VDC nominal)
Maximum Current Draw	<500mA
Output Current	~450mA
RF Power Output (EIRP)	< 20dBm / 100mW, duty cycle up to 100%
Modulation Type	NON
Reverse Polarity Protection	Yes
Over Voltage Protection	Yes
Enclosure	Polycarbonate front cover, TPE housing
Compliant Standards	SAE J1455, EN61000-4-2 (ESD), EN50155
Enclosure Rating	IP67
Outer Shell Color	RAL 1032
Alerts and Warnings	
Alerts and Warnings	Audible and Visual
Visual Alerts	red / amber / green
Audio Alerts	PCM files
Audio Alert Customization	Audible PCM files can be added
Other	
Safety Modes	Predictive and Monitoring
System Configuration	Web-based User Interface
GPS Support	None / External / DVR
DVR	Compatible with Safe Fleet DVR Systems