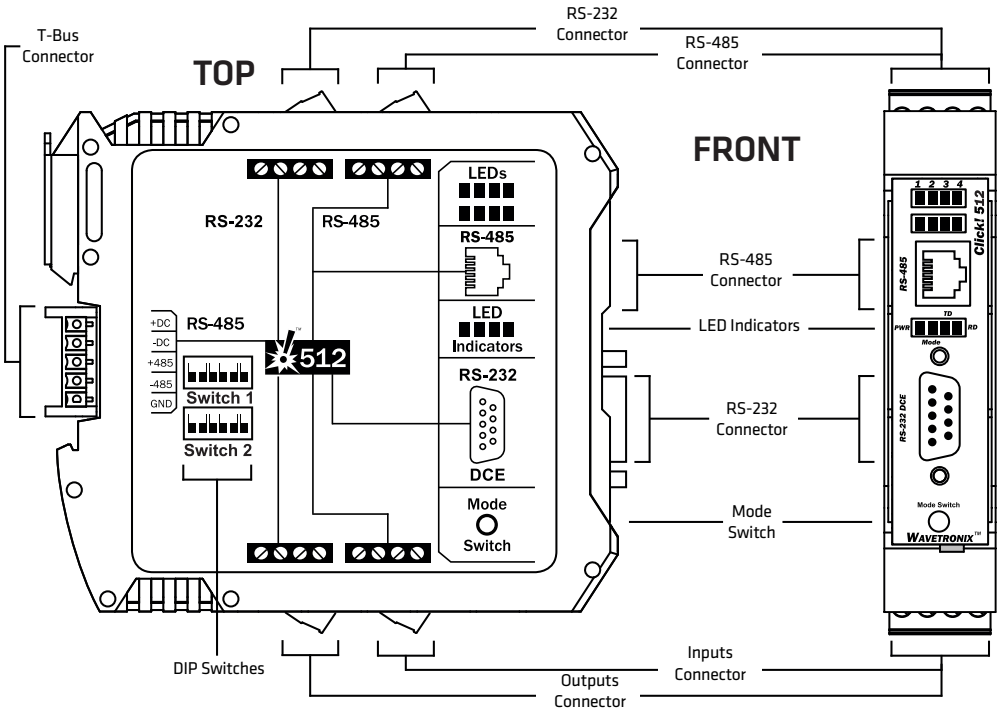
Vehicle alert

The Click 512 is a vehicle-alert device that monitors lane, speed, length, and class information from a SmartSensor HD and then compares the detected data to a set of predetermined threshold values. A digital output is activated when the data exceeds these thresholds.

- Triggers up to eight contact closure alarms based upon individual vehicle lane, speed and length information
- Separate lane, speed and length thresholds for each alarm
- Mounts to a DIN rail for quick and easy installation
- Uses Click Supervisor for user-configuration of thresholds and output actuation
- Remote upgradable with additional terminal server for IP access
- Vehicle detection information is forwarded to the front serial port and signaled on LEDs
- Built-in trigger synchronization logic
- Contact closure output duration is configurable



Technical specifications

Physical

- Weight: 0.29 lbs (0.1 kg)
- Physical dimensions: 4.5 in. × 4 in. × 0.9 in. (11.4 cm x 10.2 cm x 2.3 cm)
- Ambient operating temp: -29°F to 165°F (-34°C to 74°C)
- Humidity: up to 95% RH

Mounting

- DIN rail–mountable
- Hot-swappable

Power

- Power supply voltage: 9–28 VDC
- Power consumption: 0.8 W

Connections

- Power:
  - 5-position connector from the T-bus
  - Voltage input monitoring with settable thresholds of 11.7 or 22.9 VDC
- Four independent physical serial ports
  - RS-232 front: DB-9 female DCE connector with DIP switch override to select between programming and run mode
  - RS-485 back: 5-position connector for connecting from T-bus
  - RS-232 top: Pluggable screw terminal
  - RS-485 top: Pluggable screw terminal and an RJ-11 jack
- Two multi-function digital input ports
  - Low-level AC input monitoring via clamp-on split-core current transformers with 1 W 120 VAC load threshold suitable for monitoring incandescent or LED signal indication status
  - Contact closure input monitoring circuit that also serves to monitor low-level DC logic with threshold at 2.5 V
  - DC voltage input monitoring with selectable thresholds of 9, 11.7, and 23.4 VDC
  - Maximum input event frequency of 250 Hz
- Two solid state contact closure output ports
  - 250 Hz output signaling capability

Communication

- Converts RS-232 to RS-485 and vice versa
- SmartSensor HD communication over RS-485 T-bus
- Click Supervisor communication over RS-232 front port (Device Setup Mode) or RS-232 top port (Run Mode)
- Data forwarding over RS-232 front port (Run Mode)
- Communication to a Click 100/112/114 over RS-485 top/front port
- In Converter mode, converts RS-232 to RS-485 and vice-versa

Ordering information

Click 512
CLK-512

Contact us

801.734.7200
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Baud rate

- Operates at baud rate of 9600 bps (default) and 115200 bps
- Click Supervisor baud rate of 9600 bps
- Data forwarding baud rate of 9600 bps
- Click 100/112/114 baud rate of 9600 bps

Configuration features

- Push-button on faceplate does the following:
  - Sets device to Run mode
  - Sets device to Setup mode
  - Sets device to Serial Convert mode
  - Resets to device factory defaults
- Multicolored LEDs have activity indicating function:
  - Red LED illuminates when device has power
  - Green LED (TD) illuminates when data is transmitted
  - Yellow LED (RD) illuminates when data is received
- Multicolored LEDs also act as operation mode indicators
- Two banks of LEDs (yellow and red) display submenu selections and application information
- Supported by user-friendly GUI (graphical user interface) for control of program parameters
- DIP switches for selection of run mode versus programming mode, multi-function inputs and supply voltage monitor thresholds

Testing features

- Push-button can be used to generate output signals to test system configuration

Pocket PC & PC configuration software

- Comes with Click Supervisor, configuration software with the following features:
  - Runs on Pocket PC or Windows desktop or laptop PC (Windows 2000 and newer)
  - Configures vehicle speed and length thresholds for up to eight classes.

- Can save/open a configuration to/from a file, allowing a common configuration to be easily programmed into many devices
- Has customizable driver(s) that are stored in an XML file that describes the settings for a devices as well as graphical user interface for that driver in the configuration software

Upgrade utility software

- Upgradable and programmable without case removal

Testing

- Passes manufacturer's test before shipping
- Tested under IEC 60950-1

Extended support

- Extended support options are available from Wavetronix; contact a Wavetronix representative for more information

Warranty

- One-year warranty against material and workmanship defect (see Click Warranty datasheet for complete details)

Bid specifications

1.0 General. This item shall govern the purchase and installation of a vehicle alert module (VAM) equivalent to the Wavetronix Click 512. Test results and other documentation demonstrating performance and capabilities shall be provided.

2.0 Product description. The VAM shall be a traffic alert module for use with serial devices, such as the Wavetronix SmartSensor.

3.0 Physical. The VAM shall not exceed 0.29 lbs. (0.1 kg) in weight.

The VAM shall not exceed 4.5 in. × 4 in. × 0.9 in. (11.4 cm x 10.2 cm x 2.3 cm) in its physical dimensions.

The VAM shall operate in the temperature range of -29°F to 165°F (-34°C to 74°C).

4.0 Mounting. The VAM shall mount to a DIN rail with hot-swappable power and communication buses for quick installation and replacement.

5.0 Power. The VAM shall operate using less than 0.8 W of average power at 9–28 VDC.

6.0 Connections. The VAM shall include the following connections for power and communication:

6.1 Power. The VAM shall include a 5-position connector, with two contact points reserved for connecting power through the bus.

The VAM shall supply voltage input monitoring with settable thresholds of 11.7 or 22.9 VDC.

6.2 Serial ports. The VAM shall include the following four independent physical serial ports:

- RS-232 front: DB-9 female DCE connector with DIP switch override to select between programming and run mode
- RS-485 back: 5-position connector for connecting from T-bus
- RS-232 top: Pluggable screw terminal
- RS-485 top: Pluggable screw terminal and an RJ-11 jack

6.3 Digital input ports. The VAM shall include two multi-function digital input ports with the following features:

- Low-level AC input monitoring via clamp-on split-core current transformers with 1 W 120 VAC load threshold suitable for monitoring incandescent or LED signal indication status
- Contact closure input monitoring circuit that also serves to monitor low-level DC logic with a threshold of 2.5 V
- DC voltage input monitoring with selectable thresholds of 9, 11.7 and 23.4 VDC
- Maximum input event frequency of 250 Hz

6.4 Contact closure output ports. The VAM shall feature two solid state contact closure output ports with 250 Hz of output signaling capability.

7.0 Communication. The VAM shall have the following communication capabilities:

7.1 Serial protocol conversion. The VAM shall allow communications with any serial device that has a serial connection by converting 3-wire half-duplex RS-485 communication to half-duplex RS-232 communication, and vice versa.

7.2 SmartSensor HD. The VAM shall communicate with the SmartSensor HD over the RS-485 T-bus.

7.3 Click supervisor. The VAM shall communicate with Click Supervisor over the RS-232 front port in Device Setup mode and the RS-232 top port in Run mode.

7.4 Data forwarding. The VAM shall use data forwarding over the RS-232 front port in Run mode.

7.5 Click 100/112/114. The VAM shall communicate with the Click 100/112/114 modules over the RS-485 top/front port.

7.6 Converter mode. The VAM shall convert 3-wire half-duplex RS-485 communication to half-duplex RS-232 communication, and vice versa.

8.0 Baud rate. The VAM shall operate at multiple baud rates between 9600 bps (default) and 115200 bps.

The VAM shall communicate with Click Supervisor at 9600 bps.

The VAM shall have a data forwarding baud rate of 9600 bps.

The VAM shall communicate with Click 100/112/114 modules at 9600 bps.

9.0 Configuration features. The VAM shall have a push-button on the faceplate that:

- Sets device to Run mode
- Sets device to Setup mode
- Sets device to Serial Convert mode
- Resets to device factory defaults

The front of the VAM shall include a red power LED, as well as green and yellow TX and RX LEDs that shall illuminate when corresponding data is successfully transmitted or received.

These LEDs, as well as the blue LED next to them, shall also act as operation mode indicators for operation modes selected with the push-button.

The VAM shall include two banks of user-programmable LEDs, one yellow and one red, to display submenu selections and application information.

The VAM shall be supported by a user-friendly graphical user interface that will control the program parameters.

The VAM shall have DIP switches that will be used to select run mode versus programming mode, multi-function inputs and supply voltage monitor thresholds.

10.0 Testing features. The VAM shall feature a self-test for system configuration. This test shall be accessed by using the push-button on the faceplate.

11.0 Pocket PC& PC configuration software. The VAM shall be provided with configuration software that:

- Runs on Pocket PC or Windows desktop or laptop PC (Windows 2000 and newer)
- Configures vehicle speed and length thresholds for up to eight classes
- Can save/open a configuration to/from a file, allowing a common configuration to be easily programmed into many devices
- Has customizable driver(s) that are stored in an XML file that describes the settings for a devices as well as graphical user interface for that driver in the configuration software

12.0 Upgrade utility software. The VAM shall be upgraded using software that:

- Runs on a Windows desktop or laptop PC (Windows 2000 and newer)
- Can upgrade the VAM firmware to add new features to the VAM

13.0 Testing. Before shipping, each VAM shall have passed a manufacturer's test.

Each VAM shall comply with all CE requirements under IEC 60950-1.

14.0 Extended support. Extended support options shall be available. Contact the manufacturer's representative for more information.

15.0 Warranty. The VAM shall be warranted to be free from material and workmanship defects for a period of one year from date of shipment.