#### ALL TRAFFIC SOLUTIONS



#### PRODUCT SPECIFICATIONS:

# SPEEDALERT 18 RADAR MESSAGING SIGN

#### SpeedAlert Radar Message Sign

- SpeedAlert 18 (SA18): 18" x 28" full matrix (SpeedAlert 24 (SA24) 24" x 60" full matrix also available – See separate SpeedAlert 24 Spec Sheet
- Size and Weight without battery
  - o 30"x20"x2.74" (without Your Speed sign), 29 lbs
- Full matrix display
- Universal mounting system: attach to pole, trailer or vehicle hitch mount
- Integral camera for awareness and alert triggered images: 640x480 pixel daylight images
- Internal K band radar with adjustable sensitivity
- Meets MUTCD Specifications

#### **SpeedAlert Operation Modes**

- Message Mode: Display one message, up to 6 screens
- All Messages: Sequence all messages in sign memory
- Speed Display: Display approaching vehicle's speed
- Dependent Message: Display targeted messages based upon vehicle's speed, up to 6 screens per message
- · Changeable speed limit sign
- Stealth or Display Off: Collect traffic speed and volume data with no LED display, YOUR SPEED sign easily removed
- Schedule: Change message and/or mode up to 13 times/day
- Collect vehicle volume by speed and time data in all modes
- Sign returns to last mode and configuration when power applied

#### SpeedAlert Programming Methods

#### On-Board Programming (standard on all units)

- Select operation mode
- Set Speed Limit
- · Select message from sign's memory

## TraffiCloud™ Web-based Remote Management Services:

Remote Management using integral cell modem (See Trafficloud Specification for more information):

- Turnkey system. Remote connectivity functional upon ship. Unit connects to TraffiCloud Service when sign powered
- Fully hosted web-based management system
  - o Internet connected computer with browser provides anywhere access on all connected devices with browser.
  - o No IT involvement or support necessary. System bypasses customer network eliminating access issues
  - o Cellular provided by ATS, no separate cellular charges
  - o Hosted database requires no setup or maintenance by customer

#### Apps – All apps included in Traffic Suite:

- Equipment Management: Online sign management Change messages and settings remotely
- **Reporting:** Online data retrieval, management and analysis, Enhanced report generation
- Image Management: Online image retrieval and management of images from sign's internal camera
- Alerts: Notifications for low battery and tampering, high speed and congestion; Alerts can include images
- Mapping: Visually manage equipment and data
  - o Premier Care Perpetual Warranty

#### ATS PC Sign Manager

Local Management using PC with USB connection standard with all signs, Bluetooth optional

- · PC based client software
- Connect to sign via USB or Bluetooth (Optional)

ATS Android App: Local Management (Optional):

- Android OS wireless Bluetooth control local to unit
- Android device can be phone or WiFi device with Bluetooth

#### Local Management Features: (PC and Android)

- · Create and change messages, modes and settings
- · Local data retrieval and management
- Local image retrieval and management from sign's internal camera
- Manage all unit settings, automatic sync with TraffiCloud Web Based Remote Management Service if subscribed
- All traffic data and messages saved for online management and backup
  - Retrieve data and save to TraffiCloud at no cost, generate limited reports online from hosted data. Extended reports available with TraffiCloud subscription
  - Create message and save to TraffiCloud library, messages available on all ATS Android App or PC Sign Manager devices with TraffiCloud subscription

#### SpeedAlert Messages

- SA18: 1-2 line messages
  - o 1 line: 10 1/4" H x 5.75" W characters, 4 per line
  - o 2 lines: 7" H x 4" W characters, 6 per line
- Up to 6 screens per message
- Full graphics capability, each LED individually controllable
- Variable display time, flash and reverse rates for each screen
- Scroll through 25 user defined onboard messages using selector buttons built into sign, no training necessary
- Ability to sequence messages for up to 144 screen animation
- Message power efficiency calculator in software
- Actual sign preview and unlimited message storage using TraffiCloud Web-based Remote Management Service, ATS PC Sign Manager or ATS Android App
- Messages on sign retained when power removed
- · Sign returns to last message when power applied
- Conditional Messaging Accept local or remote data and dynamically display messages driven off data, and/or incorporate into messages

#### **SpeedAlert Programming**

Configure the following parameters via TraffiCloud Web-Based Management System, ATS Android App or PC Sign Manager

#### Messages

- o Create and load message using "Display Now" feature
- o Load 24 messages into sign's memory
- o Scroll messages in sign's memory
- o Display signs stored in TraffiCloud Web, ATS Android App or PC Sign Manager

#### Speeds

- o Speed limit
- o Maximum speed displayed
- o Display on/off/specific mph activation
- o Radar sensitivity (range)
- Speed limit sign operation: Change speed limit up to 13 times per day schedule
- o Metric capable display with hundreds digit
- Set time via PC, Android or sync with cell signal (TraffiCloud)
- o Sign firmware field and remotely upgradeable

#### Speed Dependent Message System

- Different messages for each of 5 speed ranges
  - o No cars
  - o Cars <= speed limit
  - o Cars > Speed Limit, < x
  - o Cars > x < upper speed
  - o Cars > upper speed
- Ranges dependent on speed limit setting only, so simple speed limit change adjusts all dependent message ranges
- Independent Maximum Speed Displayed setting
- Speed Dependent Messages can be any SA18 messages, including
  - o "YOUR SPEED" screen, 18" speed display digits
  - o "SPEED LIMIT" screen, 18" speed limit display digits

#### Scheduling

- All days, multiple messages: schedule up to 50 different messages or modes for up to 13 different time periods in a 24 hour day, repeats in each 24 hour cycle
- 7 day, multiple messages: schedule different messages or modes for up to 13 different time periods in each 24 hour day for each of 7 days, repeats in each 7 day cycle; up to 50 different messages can be used over the 7 day period

- All messages and scheduling reside on the sign
  no external hardware necessary
- Program schedule via TraffiCloud Web, ATS Android App or ATS PC Sign Manager, Save toload onto multiple signs
- · Camera activation controlled in schedule windows
- Internal real time clock, time and schedule maintained with power disconnected

#### SpeedAlert Data Logging Option

- Traffic reports generated using TraffiCloud Web-based Reporting App
- Collect data automatically with TraffiCloud Remote Management or locally with ATS Android App or PC Sign Manager
- Reports include tables and charts to address all constituents with the most applicable data presentation
- All reports exportable to excel, csv and pdf
- Automatic Data Collection TraffiCloud Web
  - Data retrieval every 15 minutes near real time reporting, memory never full
  - o All data in one database for analysis filtered by location, date and time
  - o Access reports from interactive map view by location
- Local Data Collection: ATS Android App or PC Sign Manager
  - All data hosted in online database for anywhere access
  - o Download traffic data from sign with USB or Bluetooth connection
  - 30 days of high volume data minimum storage on sign, Data collection rolls over when memory reaches capacity

#### • Reports, local data collection:

- Summary page with average and 85th percentile speed, average daily volume, 10 MPH pace speed, high and low speed, display mode
- o Traffic counts by speed range, full day and time of day over selected date range with 5 MPH resolution
- o Vehicle counts by time range per day by hour
- o Vehicle counts by speed range and time of day
- Reports, automatic data collection (TraffiCloud Web based Management Services)
  - o Enhanced Summary with detail charts and graphs
  - Compliance by speed range with 3 ranges

- Enforcement report showing highest speed and volume violators over selected locations
- o Effectiveness report showing program performance

#### Construction

- "YOUR SPEED" sign
  - o High intensity prismatic reflective background
  - o 24" x 8"
  - o 3.5" high MUTCD 'C' letters
- LED pixels: Amber 595nm, 30 degree viewing angle, 100,000 hrs, black background, (MUTCD compliant)
- LED Density: 0.6"x1" pitch, 18 x 48 pixel matrix
- Radar: K Band (24.15 GHz), FCC Certified, no license req'd, +-1mph accuracy, 12 degree square pickup area, range: 1500+ ft., 5-105mph (8-150 kph)
- Conformal coating on all circuit boards
- Integral handle
- Weatherproof, NEMA 4, IP65 sealed
- ¼" Tinted, non-glare, UV stabilized polycarbonate face
- Drip proof, vented battery compartments (2)
- Aluminum chassis, 14 ga, white powder coat finish, black powder coat front for maximum contrast for display visibility
- Tamper resistant mounting hardware system, hardware, controls and battery access secured behind enclosure lock
- -40 to 160 F operating temperature range, 95% humidity non-condensing (-20F for Bluetooth communication, 5F for internal camera)

#### SpeedAlert Power

- Power Input, Max: 12 VDC, 3 A max, 36 W max
- Power saving circuitry and automatic dimming for ambient light conditions with adjustable dimming range and manual display brightness override
- SpeedAlert 18 Power Options:
  - o 16Ah Li-Ion Battery with built-in short circuit and reverse polarity protection circuitry; 1.5A 12.8 VDC output, 120VAC input automatic charger; Capacity for up to 2 batteries in unit for extended portable use
  - o Solar panel assist: 40W or 60W solar panel and bracket, Solar controller panel w/ 26Ah lead acid battery; 6A 120VAC automatic charger optional
  - o 100-220VAC AC power supply (6A 12VDC) in external NEMA 4 enclosure

## Compatible with these ATS Products

Engineered and manufactured in the United States of America

- 1+2. SpeedAlert 18 Pole Mount
- 3. SpeedAlert 18 on ATS-5 Trailer
- 4. SpeedAlert 18 with Full Wrap Your Speed Sign (White or Red)











- ATS-5 Trailer (batteries with optional solar assist: 235 or 470 Ah battery system, 40 or 60W solar option)
- o ATS-3 Trailer, 100Ah battery and 40W solar option
- Battery level indicator on sign, ATS Android App, ATS PC Sign Manager or TraffiCloud Remote Management.
- · Auto recovery for battery with solar

#### Standard SpeedAlert System Components

- SpeedAlert Radar Message Display SA18
- Tamper resistant mounting plate and hardware
- Key
- On-board controls
- ATS PC Sign Manger software with USB cable

#### Optional SpeedAlert Components and Features

- TraffiCloud Web-Based Remote Management Service
- ATS Android App, Bluetooth connectivity
- · Padded carrying case
- · Extra mounting brackets
- · Speed activated relay closure
  - o 7A, 30VDC or 7A 120VAC max, 100mA 5VDC min, no power supplied, simply a contact closure
  - o Trigger relay at specified speed with configurable duration from 1to 10 seconds per radar event
- Tamper alarm ATS-5 or ATS-3 trailer

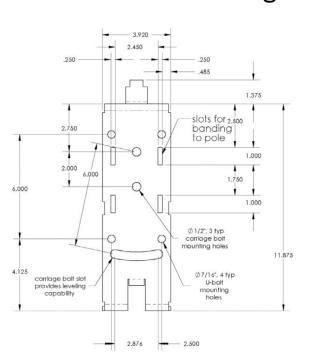
#### **SpeedAlert Mounting Options**

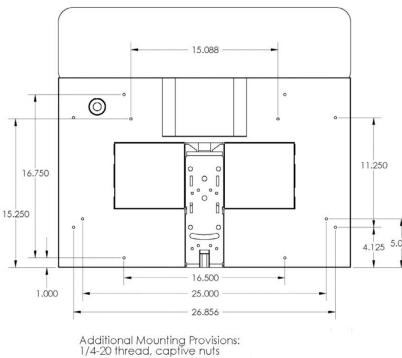
- Pole mount standard with included bracket, hardware
- NCHRP 350 approved on 4" pole (Letter SS-135)
- ATS-5 Trailer (refer to ATS-5 specifications for more info)
- ATS-3 Trailer (refer to ATS-3 specifications for more info)
- Vehicle Hitch mount
  - o Mounts sign 30" to bottom of sign from receiver tube (final height dependent on receiver height)
  - o Fits 1 ¼" or 2" receiver, adapter included, ½" hitch pin
  - o Locking rotation adjustment on 15 degree increments over 180 degrees, +/- 5 degrees tilt
  - o White powder coat finish with rear reflector
- Standard Folding Portable Post
  - o Folds for easy storage and portability
  - o iA18: 60" to 73" to bottom, 80" to 93" to top of sign depending on leg positions
- Mounting provisions for permanent applications with ¼-20 threaded holes

#### Warranty

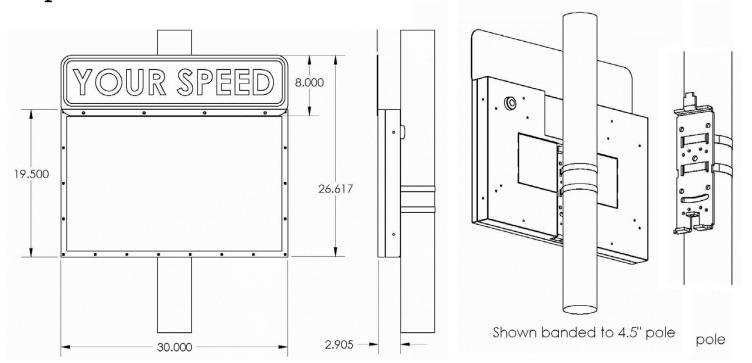
- 1-year warranty (three months on Li-Ion batteries)
  - o Product software upgrades free
- PremierCare, included with TraffiCloud Web Subscription
  - o Perpetual warranty for the duration of subscription
  - o Accessories, vandalism and accidental damage (non-warranty) at 50% off list price

## SpeedAlert 18 Mounting Bracket and Mounting Holes





## SpeedAlert 18 Dimensions



## SpeedAlert 18 with Trailer Mounting Brackets Installed - for Installation on Existing Trailers for Trade In

