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
  - 30"x20" x 2.74" (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: 640 x 480 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 six 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 TrffiCloud specification for more information):

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

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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
  - o Retrieve data and save to TraffiCloud at no cost, generate limited reports online from hosted data. Extended reports available with TraffiCloud subscription
  - o 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, four per line
  - o **2 lines:** 7" H x 4" W characters, six 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)
  - o **Speed limit sign operation:** Change speed limit up to 13 times per day schedule
  - o Metric capable display with hundreds digit
  - o 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 five 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
- **Seven Day, Multiple Messages:** Schedule different messages or modes for up to 13 different time periods in each 24 hour day for each of seven days, repeats in each seven day cycle; up to 50 different messages can be used over the seven day period

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- 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 to load 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
  - All data in one database for analysis filtered by location, date and time
  - 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
  - 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
  - Traffic counts by speed range, full day and time of day over selected date range with 5 mph resolution
  - Vehicle counts by time range per day by hour
  - Vehicle counts by speed range and time of day
- Reports, automatic data collection (TraffiCloud Web-based Management Services)
  - 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
- Effectiveness report showing program performance

Construction

- 'YOUR SPEED' sign
  - High intensity prismatic reflective background
  - 24" x 8"
  - 3.5" high MUTCD 'C' letters
- **LED Pixels:** Amber 595nm, 30 degree viewing angle, 100,000 hours, 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 required, +-1 mph accuracy, 12 degree square pickup area, range: 1500+ ft., 5-105 mph (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)
- Aluminium 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:**
  - 16Ah LFP 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
  - Solar panel assist: 40W or 60W solar panel and bracket, Solar controller panel with 26Ah lead acid battery; 6A 120VAC automatic charger optional
  - 100-220VAC AC power supply (6A 12VDC) in external NEMA 4 enclosure

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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)

- o 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 information)

- 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

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SpeedAlert 18 Mounting Bracket and Mounting Holes
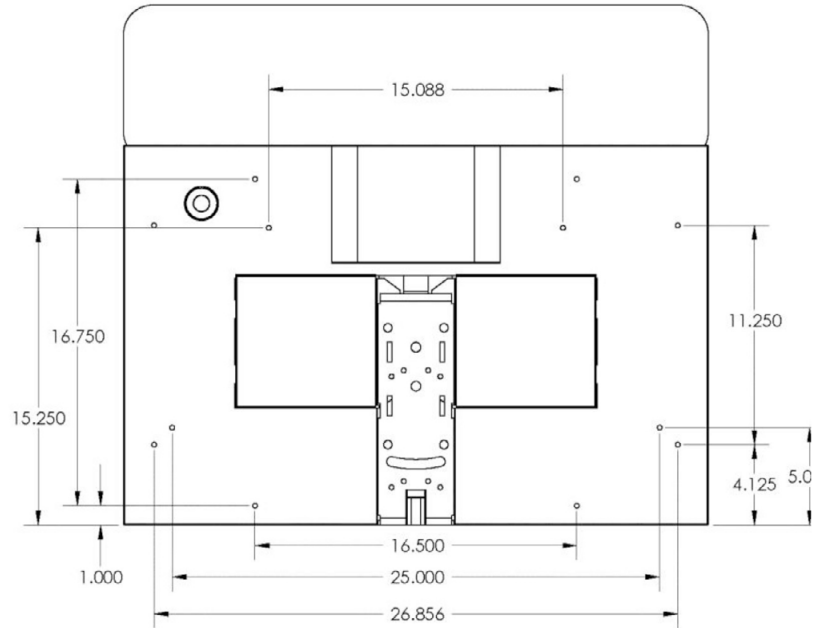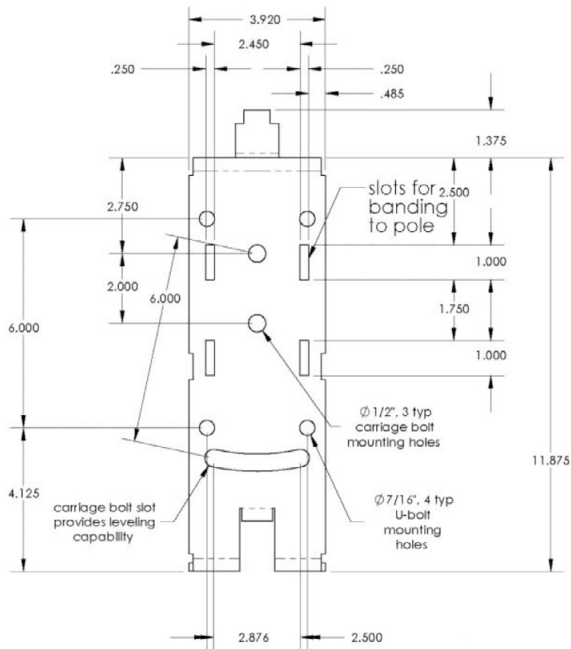
Additional Mounting Provisions:
1/4-20 thread, captive nuts

SpeedAlert 18 Dimensions

Shown banded to 4.5" pole
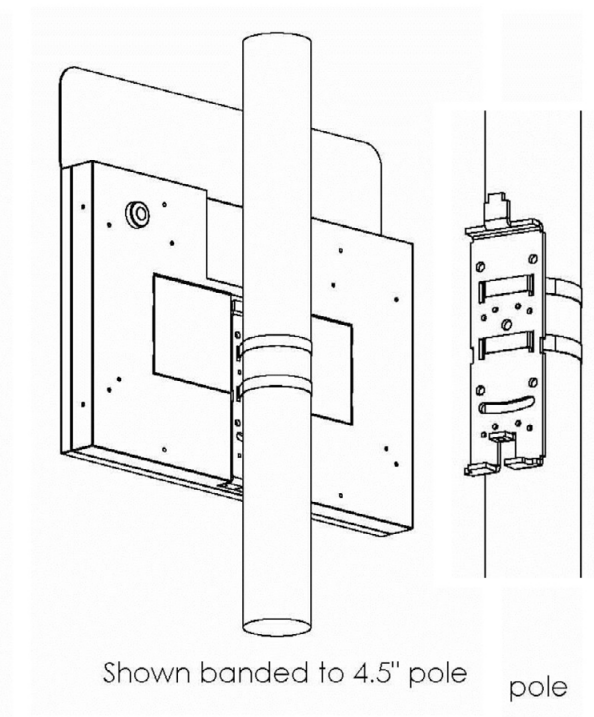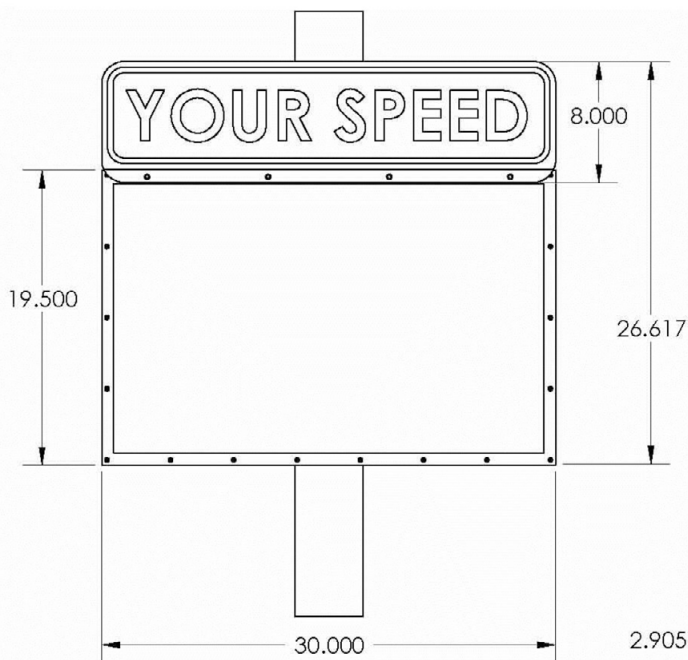
SpeedAlert 18 with Trailer Mounting Brackets Installed – for Installation on Existing Trailers for Trade In
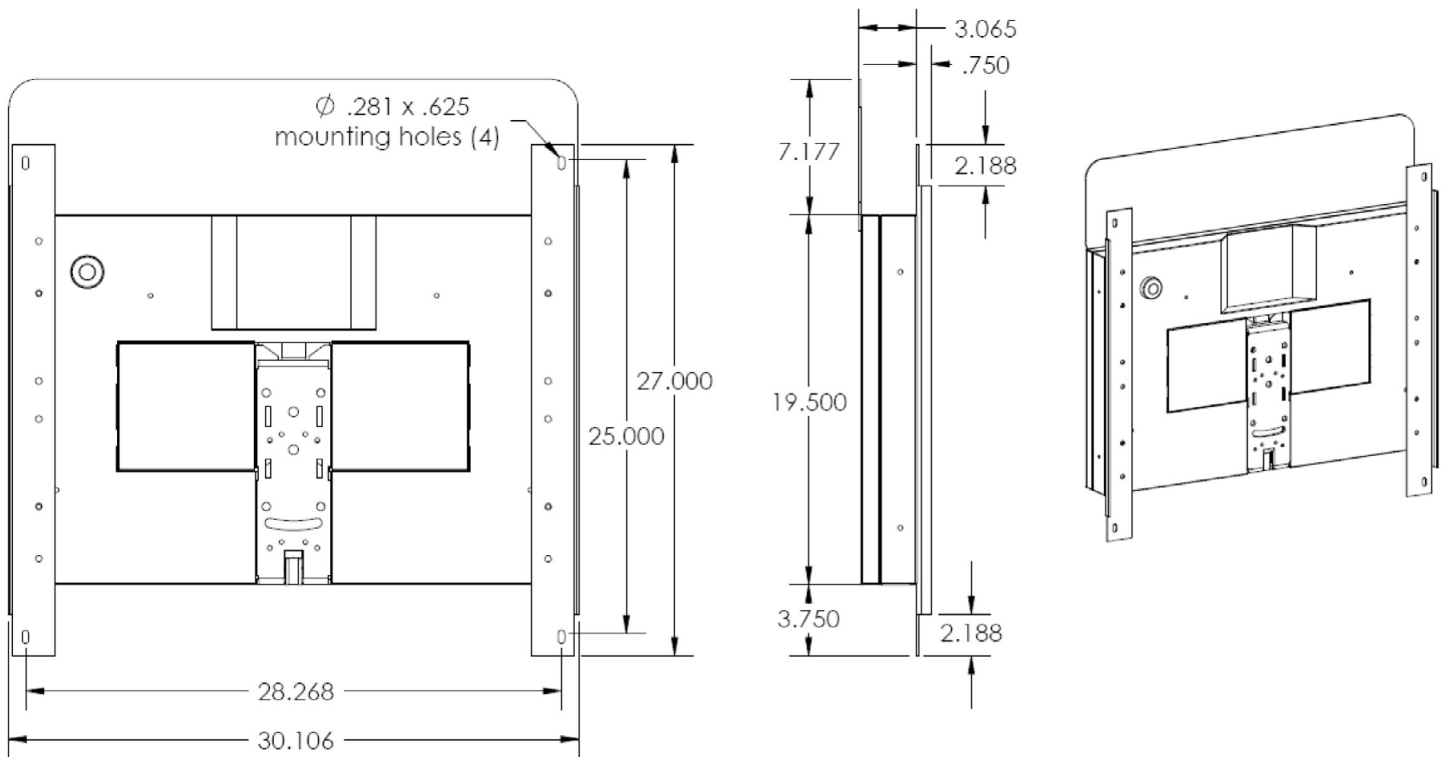
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TraffiCloud leverages our patented technology (US Patents 8,417,442; 8,755,990; 9,070,287; 9,411,893) to deliver unique cloud-based management, features and functionality.