SPEEDALERT 24 RADAR MESSAGE SIGN

ALL TRAFFIC
S O L U T I O N S

SpeedAlert 24 Radar Message Sign

- SpeedAlert 24 (SA24): 24" x 60" full matrix
- SpeedAlert 18 (SA18): 18" x 28" full matrix (see separate SpeedAlert 18 spec sheet)
  - o Weight without battery: 43 lbs
  - o Open: 28" x 60" x 1 5/8"
  - o Folded Dimensions: 28" x 30" x 3.25"
  - o Folds to fit in police cruiser trunk

- 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 daylight images
- Internal K band radar with adjustable sensitivity
- Power saving circuitry and automatic dimming for ambient light conditions with adjustable dimming range and manual display brightness override
- Meets MUTCD specifications

SpeedAlert Operation Modes

- **Message Mode:** Display one message, up to six screens
- **All Messages:** Sequence all messages in sign memory
- **Speed Display:** Display approaching vehicle's speed with 'YOUR SPEED' LED message
- Dependent Message: Display targeted messages based upon approaching vehicle's speed
- Changeable speed limit sign
- **Stealth or Display Off:** Collect traffic speed and volume data with no display
- **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 configuration when power applied

SpeedAlert Messages

- SA24: 1-3 line messages
  - o **1 line**: 24" H x 12.5" W characters, four per line
  - o **2 lines:** 10 1/4" H x 5.75" W characters, eight per line
  - o **3 lines:** 7" H x 4" W characters, 12 per line
  - o **2 lines:** (1) 7" char, 12/line, (1) 10 1/4" char, 8/line

- Up to six 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
- Messages on sign retained when power removed

- Actual sign preview and unlimited message storage using TraffiCloud® Web-based Remote Management Service, ATS PC Sign Manager™ or ATS Android appTM
- 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 Methods

On-Board Programming (standard on all units)

- Select message from sign's memory
- Select operation mode and speed limit
- Buttons time out to prevent tampering
- TraffiCloud Web-based Remote Management Services using integral cell modem for remote management (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

SpeedAlert 24: portable and versatile

Engineered and manufactured in the United States of America

Apps

All apps included in Traffic Suite™:

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

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):

- o Android OS wireless Bluetooth control local to unit
- o 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 with optional Traffic Suite
  - 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 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
- Set time via PC, Android or sync with cell signal (TraffiCloud)
- 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 SA24 messages, including
  - o 'YOUR SPEED' screen with 24" speed display digits
  - o 'SPEED LIMIT' screen with 24" 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
- 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 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 three ranges
  - Enforcement report showing highest speed and volume violators over selected locations
  - Effectiveness report showing program performance

Construction

- **LED Pixels:** Amber 595nm, 30 degree viewing angle, 100,000 hours, black background, (MUTCD compliant)
- **LED Density:** 0.6"x 1" pitch, 26 x 96 pixel matrix
- **Radar:** K Band (24.15 GHz), FCC Certified, no license required, +-1mph accuracy, 9°Vx18°H pickup area pickup area, range: 2000+ ft., 5–150 mph (8–150 kph)
- Conformal coating on all circuit boards
- Integral handles, two heights
- Weatherproof, NEMA 4, IP65 sealed
- 1/8" Tinted, non-glare, UV stabilized polycarbonate face

- Aluminium chassis, 12 ga, black powder coat finish
- Tamper resistant mounting hardware system, hardware 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:**
  - 12VDC, 8A max, 96 W max; 4A, 48W typical
- Power saving circuitry and automatic dimming for ambient light conditions with adjustable dimming range and manual display brightness override
- **SpeedAlert 24 Power:**
  - 12VDC locking plug, 30A capacity
  - Compatible power supplies include:
  - Vehicles' power port, with optional adapter
  - Trailer wiring adapter for hitch mount
  - POWERcase portable power supply, PC26 or PC36
  - 120 or 220 VAC Power supply in NEMA 4 enclosure
  - ATS 5 Trailer (batteries with optional solar assist: 235 or 470 Ah, 60W solar option)
  - Pole Battery Box: 156Ah battery with solar assist
- Battery level indicator on sign, ATS Android app, ATS PC Sign Manager or TraffiCloud Remote Management
- Auto recovery for battery with solar
- Power cable customer replaceable, gold plated connector contacts, high visibility yellow cable

Standard SpeedAlert System Components

- SpeedAlert Radar Message Sign
- ATS PC Sign Manger software with USB cable
- On-Board Controls
- Optional SpeedAlert Components and Features
- TraffiCloud Web-based Remote Management Service
- ATS Android App, Bluetooth connectivity
- Padded carrying case with accessory pockets, shoulder strap
- **Mounting Bracket:**
  - Mounts to pole or any surface using any hardware, no tools required
  - Tamper resistant hardware compartment
  - Rotate bracket for additional 12" of mounting height
  - Aluminium with black powder coat
  - Sign can be locked into bracket
  - Bolt sign to mounting bracket for additional security
  - Mounting hardware supplied
- **Speed Activated Relay Closure**
  - 7A, 30VDC or 7A 120VAC max, 100mA 5VDC min, no power supplied, simply a contact closure
  - Trigger relay at specified speed with configurable duration from 1to 10 seconds per radar event
- Tamper alarm – ATS 5

SpeedAlert Mounting Options

- ATS 5 Trailer (refer to ATS 5 specifications or more information)
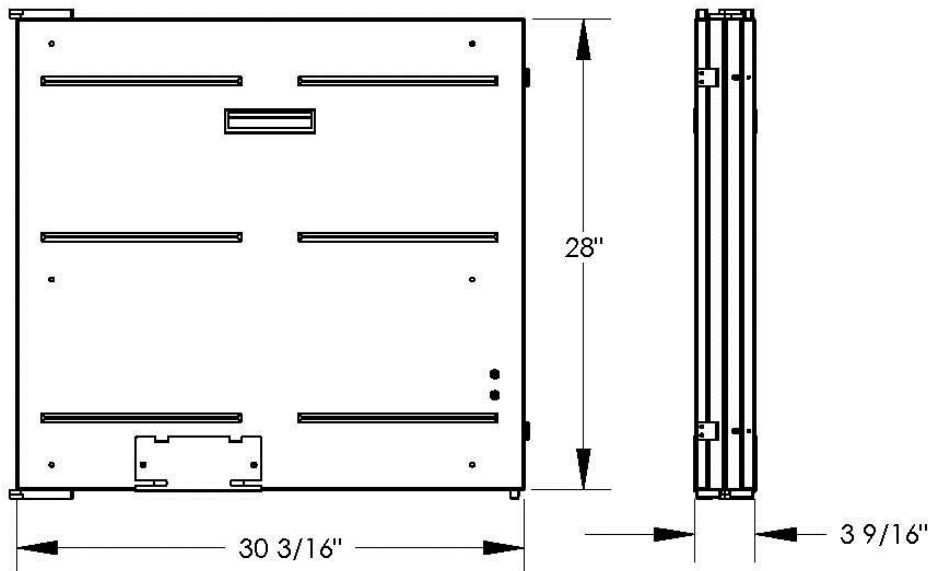- Vehicle hitch mount

Flexible mounting options:

1. SpeedAlert 24 on Hitch Mount
2. SpeedAlert 24 on ultra-portable ATS 5 Trailer

- o Mounts sign 30" to bottom of sign from receiver tube (final height dependent on receiver height)
- o Fits 1.25" 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 47" to 60" to bottom, 73" to 86" to top depending on leg positions; rotate bracket for additional 12" height
- Mounting provisions for permanent applications with ¼-20 threaded holes

Warranty

- PremierCare Support Plan available with current TraffiCloud subscription. Ask your ATS sales representative for details.
- ATS 3-year Manufacturer's Warranty comes standard on all SpeedAlert radar speed displays purchased after January 1, 2019.
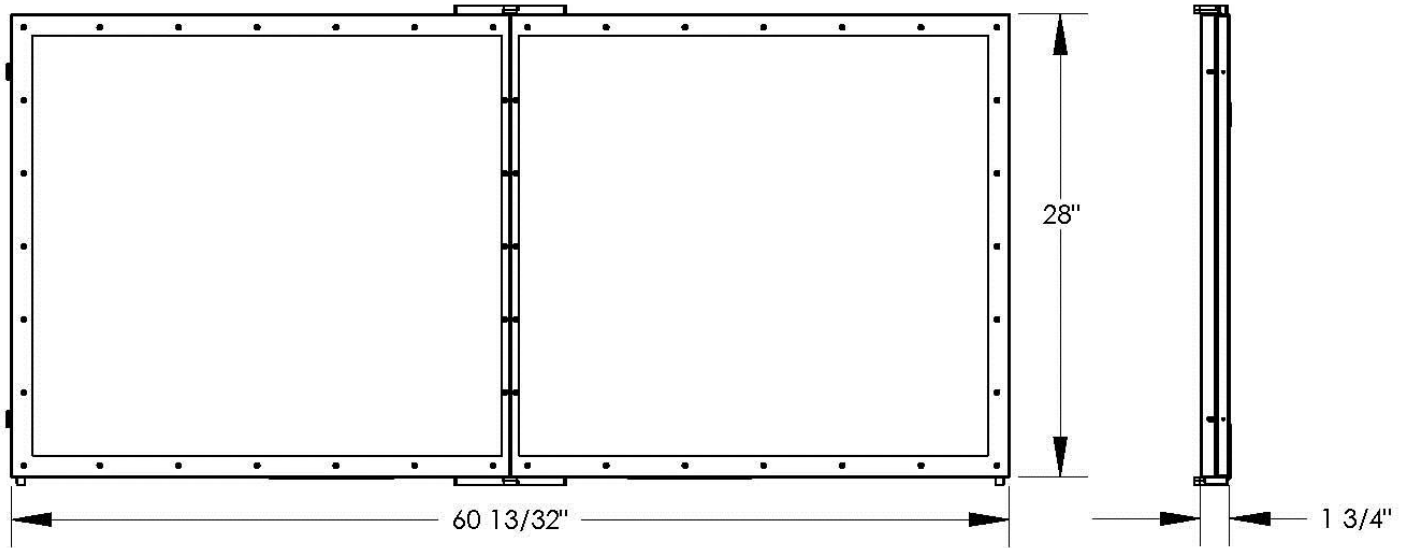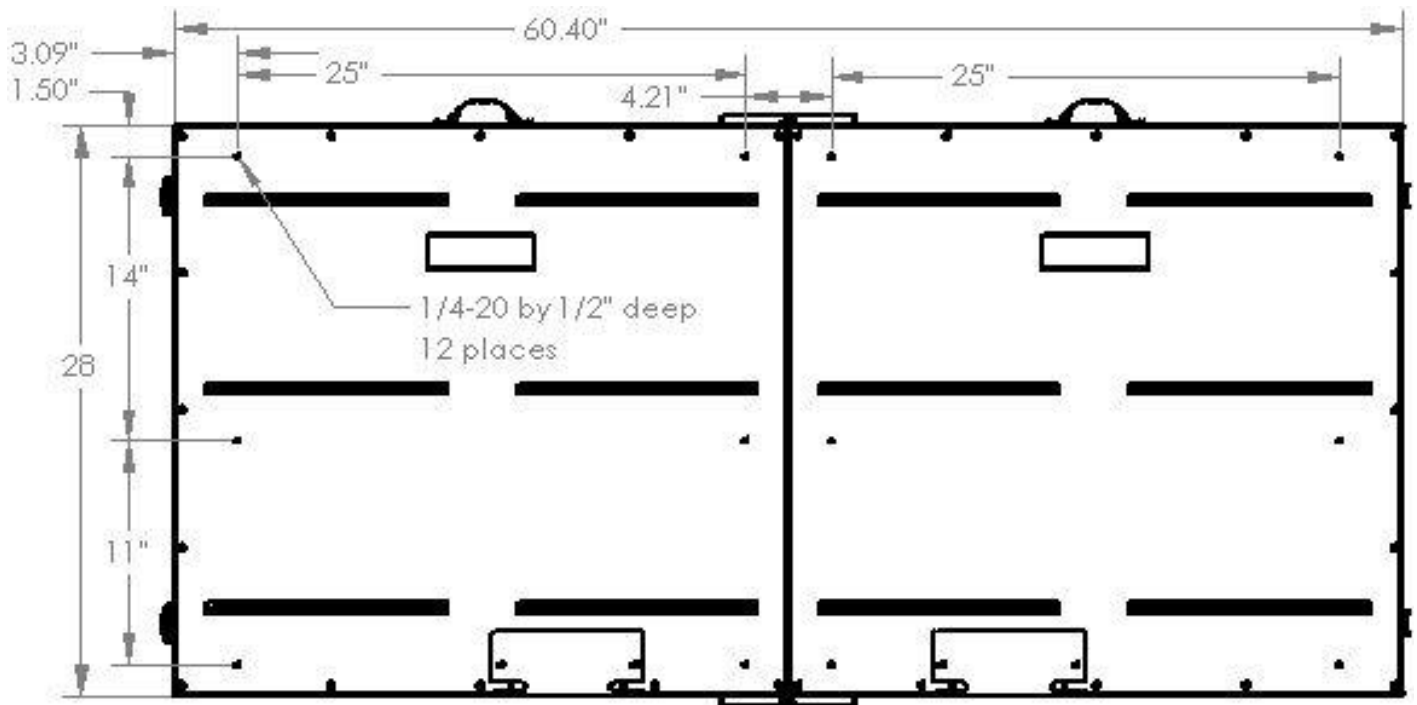
SpeedAlert Dimensions: Open

28"

30 3/16"

3 9/16"

Mounting Plate

2 1/4"

30 9/32"

3 13/32"
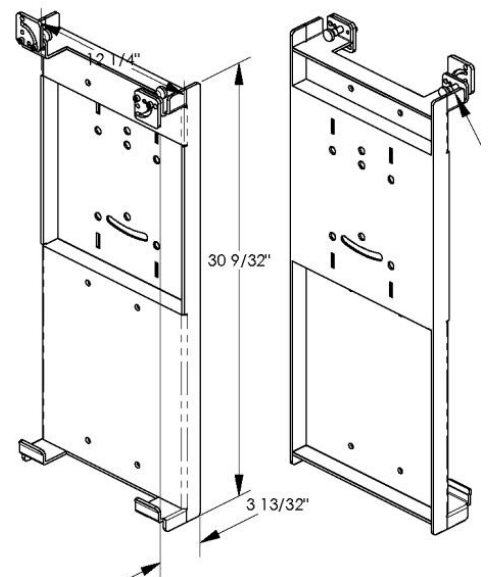
SpeedAlert Dimensions: Folded

28"

60 13/32"

1 3/4"

Mounting Hole Positions

60.40"

3.09"
1.50"
25"
4.21"
25"

14"

1/4-20 by 1/2" deep
12 places

28

11"