



## PRODUCT SPECIFICATIONS:

# SHIELD RADAR SPEED DISPLAY - B UNIT

### Shield Radar Speed Display

- 3 units to cover any application
  - Shield 12 or 12B: 12" x 6" digits, 112 LED/digit
  - Shield 15 or 15B: 15" x 8" digits, 140 LED/digit
  - SpeedAlert 18: *See SpeedAlert 18 Specification*
- Size, Weight without battery
  - Shield 12: 15.5" x 13.5" x 3.12", 12 lbs
  - Shield 15: 24" x 17" x 3.12", 18 lbs
- **Universal mounting system:** attach to pole, trailer or vehicle hitch mount
- Integral camera for awareness and alert driven images
  - 640 x 480 daylight images (optional in Sh12B, Sh15B)
- Radar: K Band (24.15 GHz), FCC Certified, no license required, +-1mph accuracy, 11 degree square pickup area, 5-105mph (8-150 kph), range: 400'
- Meets MUTCD Specifications

### Shield Operation Modes

- **Speed Display:** Display approaching vehicle's speed

### Shield Programming Methods

#### *On-board Programming (standard on all units)*

- Set speed limit
- Set display mode

### ATS PC Sign Manager Local Communication

*(PC control/USB connection: Standard with on all signs)*

- PC based client software
- Connect to sign via USB or Bluetooth (optional)
- **ATS Android App Local Communication (Optional):**
- Android OS wireless Bluetooth control local to unit
- Android device can be phone or WiFi device with Bluetooth

#### **Local Communication Features (all optional):**

- Create and change modes and settings
- Local data retrieval and management
- Local image retrieval and management from internal camera
- Manage all unit settings
- Based Management (optional)
- All traffic data can be saved for online management and backup
  - Retrieve data and save to TrafficCloud, generate limited reports online from hosted data

### Shield Speed Programming

- Configure the following parameters via ATS PC Sign Manager, ATS Android App or TrafficCloud Web-Based Management Service (optional):
  - Speed limit
  - Maximum speed displayed
  - Display on/off/specific mph activation
  - Violator Alert on/off/specific mph activation
  - Radar sensitivity (range)
- Speed limit sign operation
  - Change speed limit up to six times per day
  - Sign flashes when car passing over speed limit, blanks when car over maximum speed displayed

## Compatible with these ATS Products

Engineered and manufactured in the United States of America



Shield 12



Shield 15 on speed limit sign pole



Shield 15 on portable post



Shield 15 on ATS 5 Trailer

### Construction

- “YOUR SPEED” sign
  - High intensity prismatic reflective background
  - Shield 12: 15.5” x 13.5”
  - Shield 15: 24” x 8”
  - Sign stores for compact storage and protects sign face, thumbscrews and tamper proof hardware included
  - 3.5” high MUTCD ‘C’ letters
- **LED pixels:** Amber 595nm, 30-degree viewing angle, 100,000 hrs, black background, (MUTCD compliant)
- Conformal coating on all circuit boards
- Integral handle
- Weatherproof, NEMA 4, IP65 sealed electronics compartment
- Drip proof, vented battery compartments (2)
- 1/4” tinted, non-glare, UV stabilized polycarbonate face
- Entire face removable for service
- Tamper resistant mounting hardware pocket, hardware secured behind enclosure lock
- Aluminum chassis, 14 ga, white powder coat finish, black powder coat front for maximum contrast for digit visibility
- Protective polycarbonate corners also provide guide for YOUR SPEED sign storage
- -40 to 160 F operating temperature range, 95% humidity non-condensing (-20F for Bluetooth communication, 5F for internal camera)

### Shield Power

- Power Input, Max:
  - Shield 12: 12 VDC, 1.1 A, 15 W
  - Shield 15: 12 VDC, 1.5 A, 20 W
- Power saving circuitry and automatic dimming for ambient light conditions with adjustable dimming range and manual display brightness override

All Shield units can be powered interchangeably with any of the following power options; each unit can be outfitted for power from multiple sources selected in the field.

- **Shield 12 and Shield15:** Capacity for two batteries in unit for extended portable use
  - o 10.2Ah Lithium 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 two batteries in unit for extended portable use
  - o Solar panel assist: 40W or 60W solar panel and bracket, Solar controller panel w/18Ah or 26Ah lead acid battery, 6A 120VAC automatic charger optional
  - o 100–220VAC AC power supply (6A 12VDC) in external NEMA 4 enclosure
- **Shield 15 only:** 16Ah Li-Ion LFP battery, for longer unattended portable use, Capacity for up to two batteries in unit for extended portable use
- **Shield 15 on trailer**
  - o Trailer batteries – 100 or 235 Ah, solar option
  - o Auto recovery with solar for low battery

### Standard Shield System Components

- Shield Radar Speed Display
- Tamper resistant mounting plate and hardware
- Key
- Web based programming software for PC control with USB cable

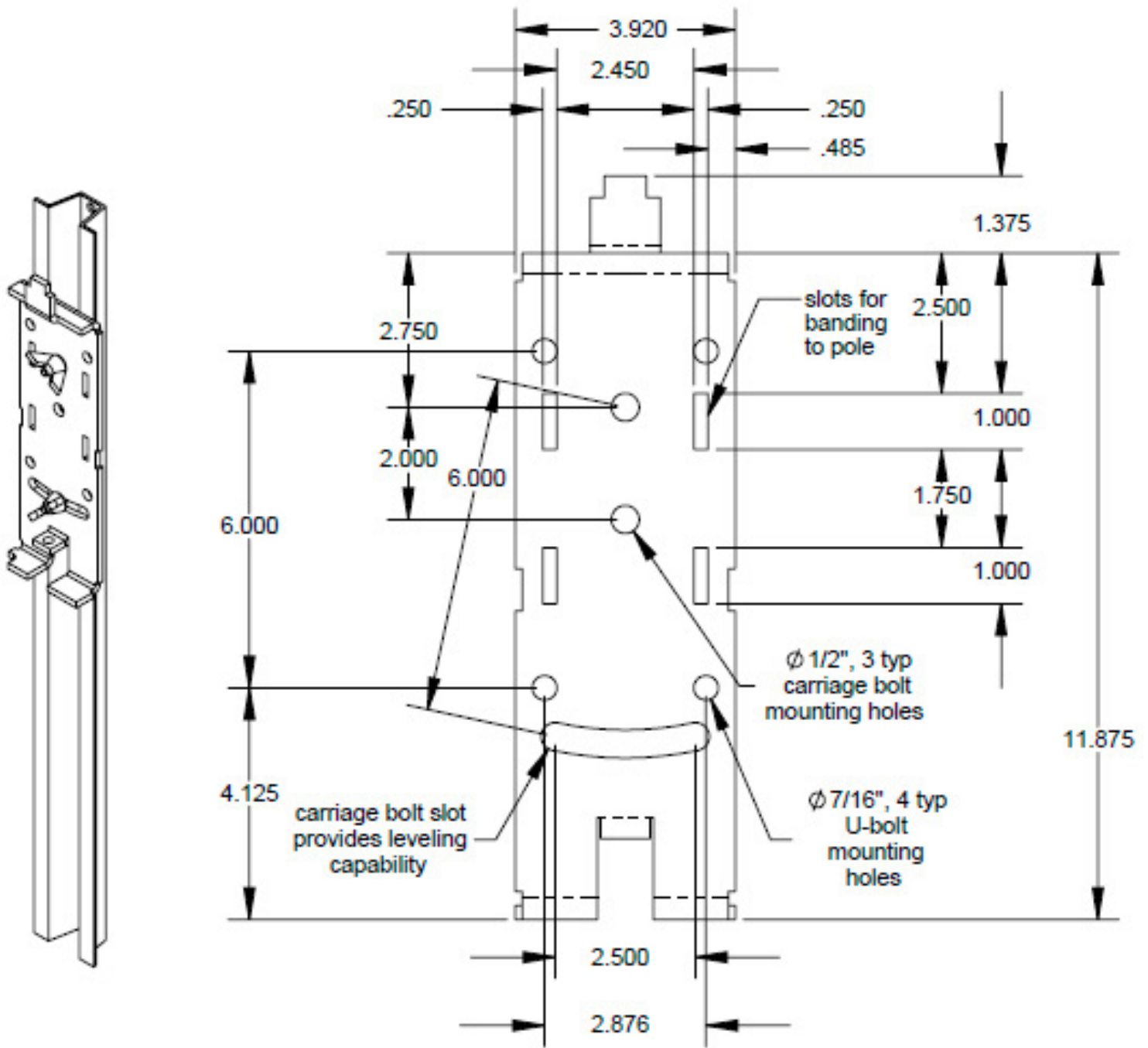
### Optional Shield Components and Features

- TraffiCloud Web-based Remote Management System
- Padded carrying case
- Extra mounting brackets
- Violator Alert, 12 white LED flash to alert violators
- Metric display
  - o Shield 12: 2-digit KPH display
  - o Shield 15: 3-digit KPH display
- Fully compatible with Speed Dependent Messaging option when used with an InstAlert Variable Message Sign – see *Speed Dependent Message System section*
- Bullet-resistant face

### Shield Mounting Options

- Pole mount standard with included bracket, hardware
  - o NCHRP 350 approved on 4" aluminum pole (SS-135)
- ATS-5 Trailer (Shield 15 only, refer to ATS 5 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
  - o 24 x 30 speed limit sign and digits included for 5–65 mph speed limit signs
- Standard Folding Portable Post: (Shield 12 and Shield 15)
  - o Folds for easy storage and portability
  - o **Shield 12:** 60" to bottom, 73" to top, add 13" for upper leg position
  - o **Shield 15:** 60" to bottom, 77" to top, add 13" or upper leg position

## Shield 12 and 15 Mounting Bracket



## Shield 12 and 15 Dimensions

Dim	X	Y	Z	B	D	E	L	H
Sh12	15.5	13.5	3.13	26.3	5.75	12	15.5	13.5
Sh15	24	17	3.12	24.3	8	15	24	8

