

Model 2000 - AVI SYSTEM

Automatic Vehicle Identification System

Technical Specifications



- * A high performance, solid state, laser diode based, moving beam bar code reader.
- * Laser is thermo-electrically cooled by a small refrigerator chip (thermo- electric cooler) that helps extend the life of the diode.
- * The system is manufactured using solid state technology and operates on a low volt power source. However, there is an electric heater to reduce condensation and keep the unit warm in cooler environments, which is also thermostatically controlled.
- * Compact scanning unit measures 20" x 12" x 7", is NEMA-4 rated (the housing is specifically manufactured for ISI from aluminum sheet stock), and then painted and clear coated to withstand harsh environments, also stainless steel enclosure available as an option.

Applications

- | | | | |
|-----------------------|-------------|--------------------------|----------------|
| * Private Communities | * Hospitals | * Employee Parking Areas | * Parking Lots |
| * Schools | * Airports | * Apartment Complexes | * Universities |
| * Condominiums | * Garages | * Golf and Country Clubs | * Bridge Pass |



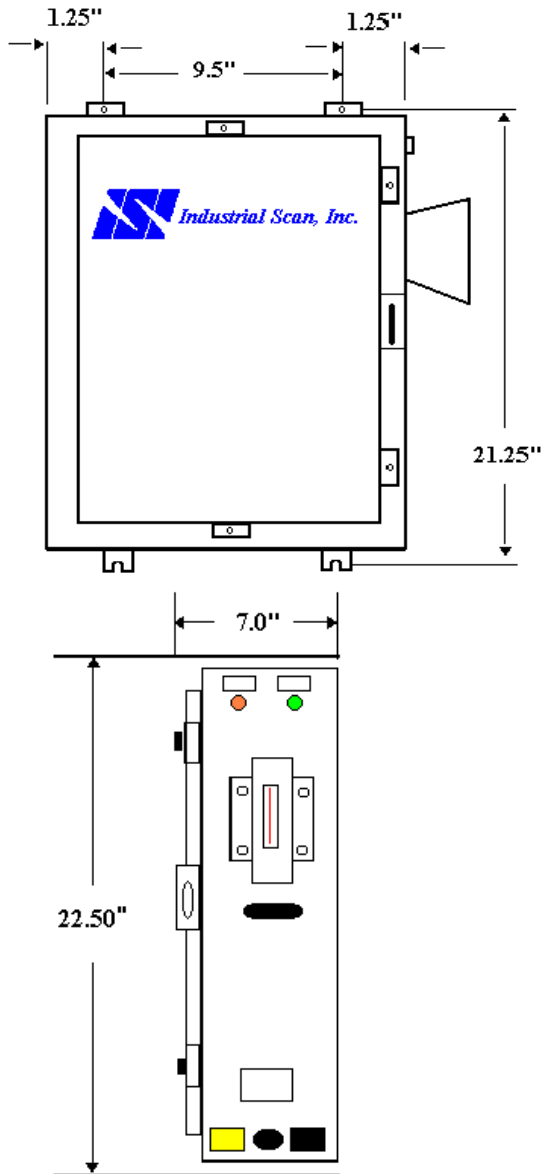
Industrial Scan, Inc.

Optimizing Bar Code Scanning Solutions

MECHANICAL MOUNTING

Mounting Centers <H x W> 21.25" X 9.5"

Measurements in inches



ENVIRONMENTAL

ENCLOSURE

Dimensions:

20" (L) x 12" (W) x 7" (H)

Mounting:

External mounting feet 21.25" (H) 9.5" (W)

Weight:

22 pounds, NEMA-4, Aluminum

35 pounds, NEMA-4, Stainless Steel

Enclosure:

NEMA-4, Aluminum (primed/painted/clear coated)

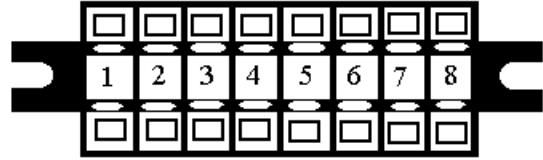
NEMA-4, Stainless Steel*

*optional

ELECTRICAL TERMINATION

AC POWER AND COMMUNICATION HOOKUP

AC Terminal Block Connections



Pin #

- 1 Earth Ground
- 2 AC Neutral
- 3 AC Hot
- 4 Switch Hot (Arming Loop)
- 5 Switch, Heater
- 6 Arming Loop Contact Return (Switched)
- 7 NO (Contact Closure) * 0.3A Max.
- 8 NO (Contact Closure) * 115vAC

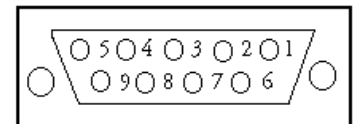
* NO (Normally Open) = Contact Closure with bar-code only available with Access Control Unit

RS232/RS422 Communication Pin-Outs

(9 Pin Female on Bracket)

Pin #

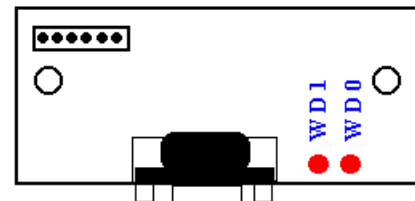
- 1 +TD (RS422)
- 2 RD (RS232)
- 3 TD (RS232)
- 4 +RD (RS422)
- 5 GROUND
- 6 -TD (RS422)
- 7 RTS (RS232)
- 8 CTS (RS232)
- 9 -RD (RS422)



Weigand Pin-Outs

(9 Pin Female on Weigand P.C. Board)

- (1) Weigand Data 0
- (2)
- (3)
- (4) Weigand Data 1
- (5) Signal Ground
- (6)
- (7)
- (8)
- (9)



ACCESS CONTROL UNIT

Scanner is available with 28SA Secura Key Access Control Unit. But it will work with all Access Control Panels with 26 bit Weigand Communication.

OPTICAL CHARACTERISTIC

OPERATING RANGE:

2 - 6 FEET

SKEW/PITCH:

45 DEGREES (TYPICAL)

SCAN HEIGHT:

30" AT 2 FEET (FROM SCANNER)

SCANNING PARAMETERS

SCAN ANGLE: 60 DEGREES

SCAN RATE: 500 - 1200 SCANS/SECOND

MOTOR TYPE: DC BRUSHLESS

COMMUNICATION PARAMETERS

RS232 & WEIGAND INTERFACE

POWER REQUIREMENTS

120V AC (+/-10%), 0.4A, 50/60 HZ

230V AC (+/-10%), 0.2A, 50/60 HZ

OPERATING REQUIREMENTS

ENVIRONMENTAL

TEMPERATURE: - 4° - 140° F
(OPERATING) - 20° - 60° C

HEATERS: * OPTIONAL - BELOW 32° F
RELATIVE HUMIDITY: 0 - 95% (NON-CONDENSING)

CONFIGURATION CAPABILITIES

READ RATE: > 99%

CODES SUPPORTED: Code 128, Code 3 of 9, Codabar
EAN/UPC, Interleaved 2 of 5, Code 93

FEATURES SUPPORTED: Beam Tracking
and Match Codes

COMMUNICATION PROTOCOLS: RTS/CTS, Half-Duplex, Full Duplex
and Specials

DATARATES: 300bps to 38400bps

OUTPUT I/F: RS232, RS422, RS485, Weigand or
Digital (special or multi-drop)

BAR CODE LABELS

Width of Narrow Bar or Space: 0.050"

LASER (Optical)

TYPE: Solid State Laser Diode
ILLUMINATION: 5 mw
POWER: Visible Red @ 670nm
WAVELENGTH: DDHS II
LASER CLASSIFICATION:



CERTIFICATIONS

FCC, CDRH Class II, CE

Safety Approvals

UL (pending)

WARRANTY

One year limited parts
and labor

SERVICE TRAINING

Installation Assistance
On-site Training

MODEL 2000 - AVI SYSTEM BAR CODE STICKERS

ISI Bar Code Stickers are specially manufactured for the ISI Model 2000 AVI Systems to our specifications.

* ISI uses an interleaved 2 of 5 bar code (with a check digit) symbology that allows us to use more digits while compromising the size of the sticker itself.

* The size of the stickers are 3.00" x 3.85" and contains 7 digits of user defined information (Facility Code and Individual ID Code). This facility code makes the code unique to an individual site.

* The stickers will damage if an attempt is made to remove them.

* The most common sticker is manufactured on white, plastic coated, highly reflective, self adhesive stock (ISI standard).

However, ISI also offers a sticker for the more discriminating users, which is a black on black bar code sticker (these are a little more expensive but are less conspicuous on a tinted window).