ACCU-SORT®

Mini-X
Series II
Omnidirectional Bar Code Scanner

Accu-Sort offers affordable omni-directional scanning.

Accu-Sort's Mini-X Series II delivers the ultimate in low cost, high performance omni-directional bar code scanning. Six available configurations guarantee the best possible fit to your application needs.

The Mini-X Series II is designed to be compatible with various communications methods, including Ethernet, Profibus, and DeviceNet.

The Mini-X Series II performs equally well in conveyor applications or where packages are manually passed under the scanner.

Six configurations meet your specific application needs:
- Mini-X Series II
- Mini-X Series II 3-Line
- Mini-X Series II Dual Zone
- Mini-X Series II VV
- Mini-X Series II Dual VV
- Mini-X Series II EC

The only moving part in most Mini-X Series II models is a brushless DC motor/ mirror wheel. The laser diode, optics, and detector are sealed in a dust-tight com-partment. The Mini-X Series II enclosure is NEMA 12-rated to perform in harsh industrial environments.

Two serial ports are provided along with input connectors for photoeyes and a tachometer. An optional multi-zone dynamic voice coil focusing option, or a dual-zone mirror wheel, is available to increase the depth of field.

DRX® and TachTrac®

Accu-Sort's patented DRX® decoding technology uses partial scans to recon-struct bar codes with 100% accuracy. DRX® enables low-aspect-ratio bar codes to be decoded, and improves read rates on damaged and poorly printed codes.

TachTrac® tracks boxes as they pass through the scan pattern, matching bar codes to the correct box. The transmit point is configurable based on the application requirements.

OUTSTANDING FEATURES

▶ **DRX® decoding provides highest read rates by combin-ing partial scans**

▶ **TachTrac® tracking provides higher throughput by allow-ing box spacing as small as 2 inches (5.1 centimeters).**

▶ **Single, long-life laser diode with thermoelectric cooler for enhanced reliability**

▶ **Small lightweight unit with self-contained decoder**

Solutions with vision®

Accu-Sort® Systems, inc. • 511 School House Road • Telford • PA • 18969
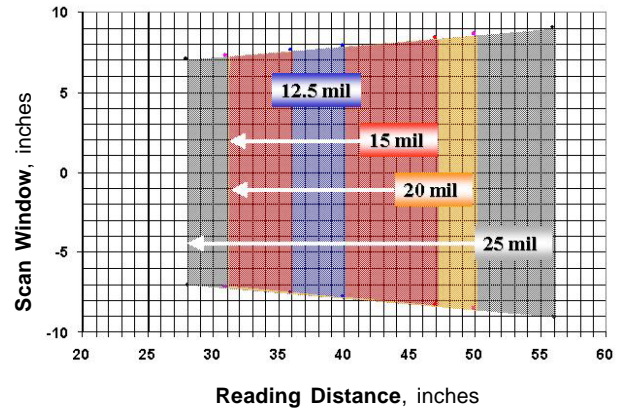
Mini-X Series II

The standard model, with a single X pattern.

Scan Rate:
500 scans (1000 segments) per second standard
700 scans per second maximum

Coverage:
14"@28" (35.6cm@63.5cm) (from mounting surface)

Mini-X Series II Dual Zone

A special, patented dual-zone mirror wheel is available for the Mini-X which doubles the depth of field without mechanical focus.
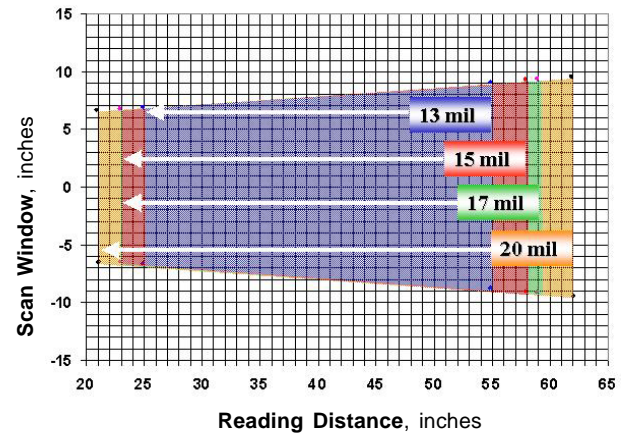
Scan Rate:
250 scans (1000 segments) per second standard
350 scans per second maximum

Coverage:
14"@25" (35.6cm@63.5cm) (from mounting surface)
20"@50" (50.8cm@127cm)
Note: Dual-zone mirror also available for Mini-XSeries II 3 Line and Mini-X Series II VV scanners.
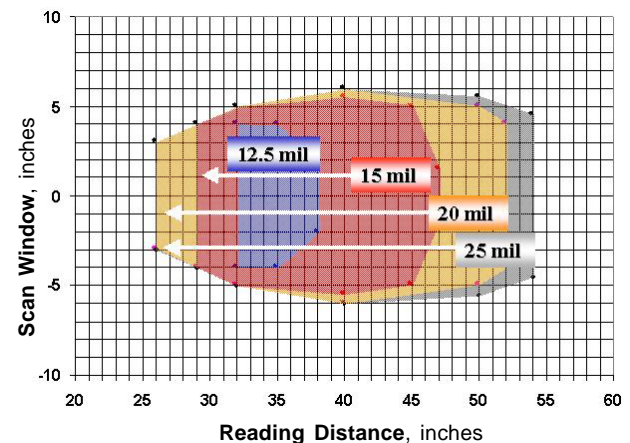
Mini-X Series II 3 Line

Three lines, for omnidirectional scanning of codes with small bar height.

Scan Rate:
500 scans (1500 segments) per second standard
700 scans per second maximum

Coverage:
6"@26" (15.2 cm@66.0 cm) (from mounting surface)
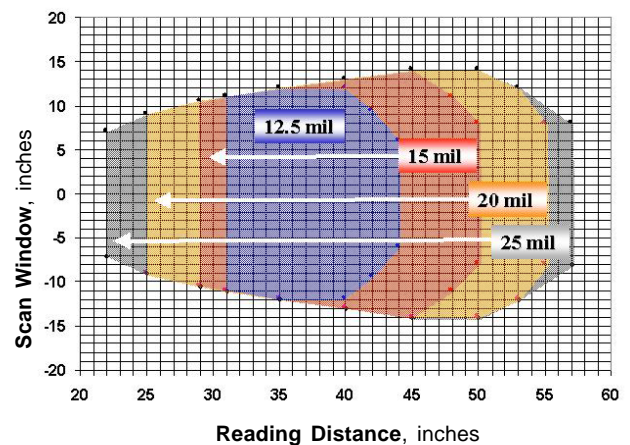10"@40" (25.4 cm@101.6 cm)

Mini-X Series II EC

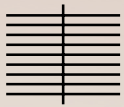A larger scan pattern for wider conveyor coverage.

Scan Rate:
312 scans (625 segments) per second standard

Coverage:
18"@25" (45.7cm@63.5cm) (from mounting surface)
28"@50" (69.7cm@127cm)

Mini-X Series II VV

One leg is rastered with a vibrating vane. For reading codes which are predominantly in ladder or picket fence orientation. Also useful where boxes are manually passed under the scanner.
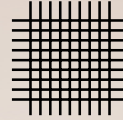
Scan Rate:
500 scans (1000 segments) per second standard
700 scans per second maximum

Coverage:
Application dependent - vibrating vane sweep distance and frequency are adjustable

Mini-X Series II Dual VV

Both legs are rastered with a vibrating vane. Useful where boxes are manually passed under the scanner, or where the bar code stops under the scan pattern.
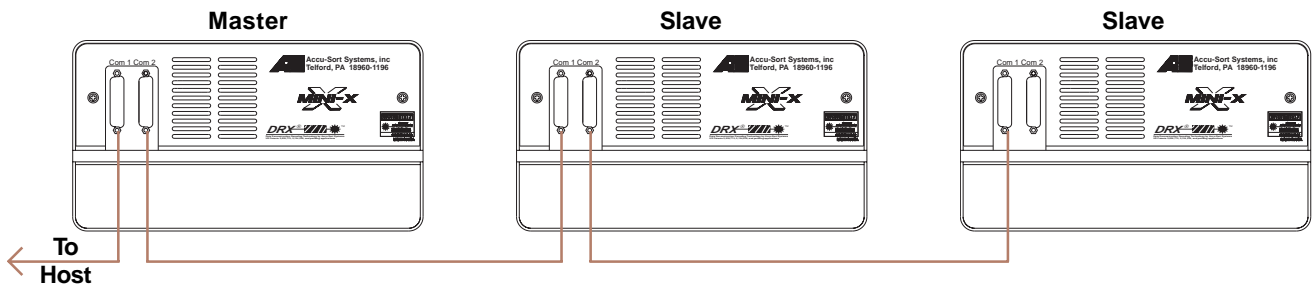
Scan Rate:
500 scans (1000 segments) per second standard
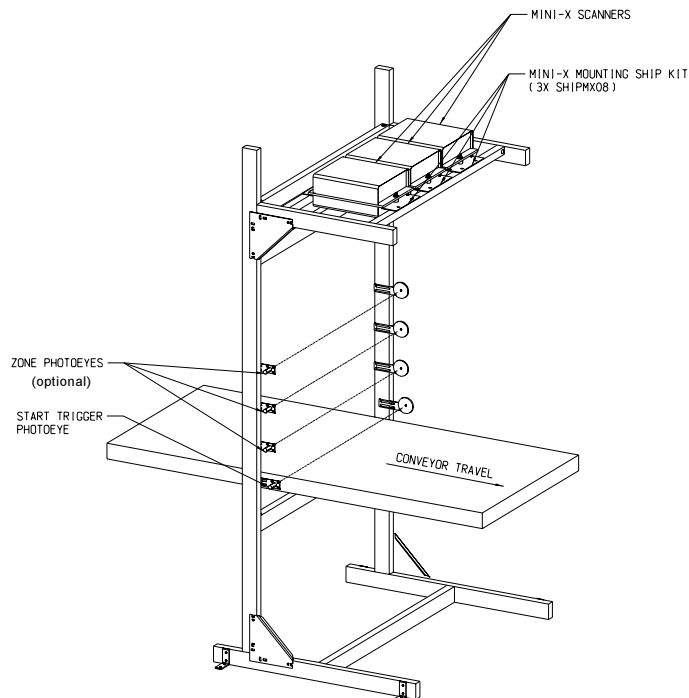700 scans per second maximum

Coverage:
Application dependent - vibrating vane sweep distance and frequency are adjustable
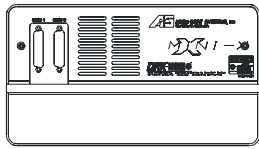
Mini-X Series II Master/Slave Configurations

To widen the applicable scan window, multiple Mini-X Series II scanners can be mounted side-by-side in an overhead configuration. When configured this way, one Mini-X serves as the "master," and communicates with the "slave" units and the host device. Bar codes read by one or more master/slave units are transmitted to the host device by the master scanner. A sample configuration is shown below.
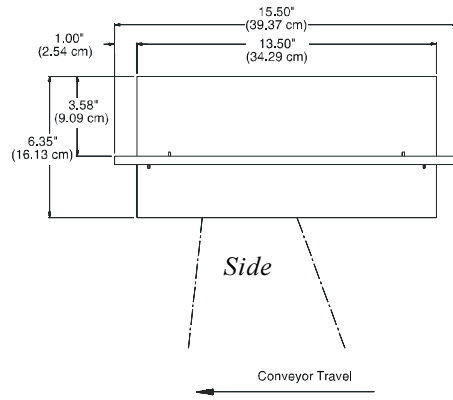
Master　　　　　　　　　　**Slave**　　　　　　　　　　**Slave**

To Host

Standard Mounting Structure

MINI-X SCANNERS
MINI-X MOUNTING SHIP KIT (3X SHIPMX08)
ZONE PHOTOEYES (optional)
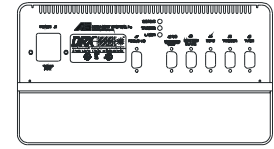START TRIGGER PHOTOEYE
CONVEYOR TRAVEL

The MT007 standard mounting structure provides a low-cost, easy-to-install mounting solution. The assembly bridges conveyors up to a maximum width of 46" (116.84 cm). The single unit will accommodate one, two, or three Mini-X Series II scanners and all necessary photoeyes and tachometers necessary for your application.
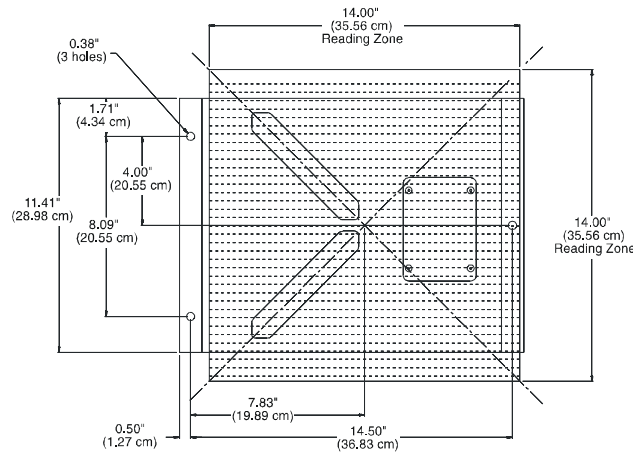
Back

Side

Front

15.50"
(39.37 cm)

1.00"
(2.54 cm)

13.50"
(34.29 cm)

3.58"
(9.09 cm)

6.35"
(16.13 cm)

Conveyor Travel

14.00"
(35.56 cm)
Reading Zone

0.38"
(3 holes)

1.71"
(4.34 cm)

4.00"
(20.55 cm)

11.41"
(28.98 cm)

8.09"
(20.55 cm)

14.00"
(35.56 cm)
Reading Zone

7.83"
(19.89 cm)

0.50"
(1.27 cm)

14.50"
(36.83 cm)

Bottom

29732d03.v01

Product Specifications

Reading Parameters:
Tilt: 360° (omnidirectional)
Pitch and skew: up to 45°
(application dependent)
Depth of field: See read chart
(application/bar code dependent)

Laser Type:
Solid state visible laser diode with
thermoelectric cooler, 670nm, 10mW
(635nm available)

Visual Diagnostics:
Trigger, laser on, power, read/
no-read

Bar code types:
All standard 1D symbologies

Connectors:
2 Serial ports
1 I/O port
1 trigger input
1 tachometer input
2 form "A" relays

Power:
100-240 VAC
50/60 Hz
20 Watts

Weight:
21 lbs. (9.5 kg)

Relative Humidity:
20%-90% non-condensing

Temperature Range:
32°-122°F (0°-50°C)

Enclosure:
Aluminum with NEMA 12 (I.P. 54)
rated optical compartment

Communications:
Communication Ports
RS-232
RS-422
RS-485
Current Loop (com1 only)
Ethernet
Profibus
DeviceNet

Options:
Multi-zone dynamic focus
One or two form "A" relay outputs
Tachometer (for TachTrac®)
Remote display
Quad relay box

Safety approvals:
UL, cUL, FCC Class A,
CDRH Class II, CE mark

Service options:
Installation assistance
On-site training

Warranty:
2-year limited, parts and labor