◆DATALOGIC

IDENTIFICATION

APPLICATIONS

- Postal/Parcel sorting and tracking
- Automated warehousing identification systems
- Airport baggage sorting systems
- Cargo applications
- Receiving / shipping systems

ADVANTAGES

Modular Scan Head and Wiring Base:
- Simplifies installation
- Reduces repair/replacement downtime

Parameter Storage Modules:
- Simplifies replacement, no need to remember operating parameters
- Store parameters in scan head and base

Scanning Over 1, 2, or 4 Read Zones:
- No focusing required, no dead zones
- Maximum depth of field

AXIOM

HIGHLIGHTS

Up to 1400 Scans per Second:
- Ensures the highest possible read rates on good and poor quality codes

AXCESS™ Software:
- Powerful and intuitive interface

Flexible Connectivity:
- EtherNet/IP, Ethernet TCP/IP standard
- Serial and I/O standard
- Insulating cover in wiring base provides on-hand, easy to use wiring information
- DRX decoding technology

GENERAL DESCRIPTION

The AXIOM™ bar code readers are designed with industrial and manufacturing applications in mind. Housed in a rugged IP65-rated enclosure, the reliable AXIOM offers high-speed scanning up to 1,400 scans per second. The AXIOM 1L (one-laser version) is designed for use in manufacturing applications with a fixed depth of field and shorter read distances. Where product size and/or positioning varies significantly, the AXIOM 2L and 4L (2 and 4-laser versions) provide accurate bar code reading at distances up to 72 inches.
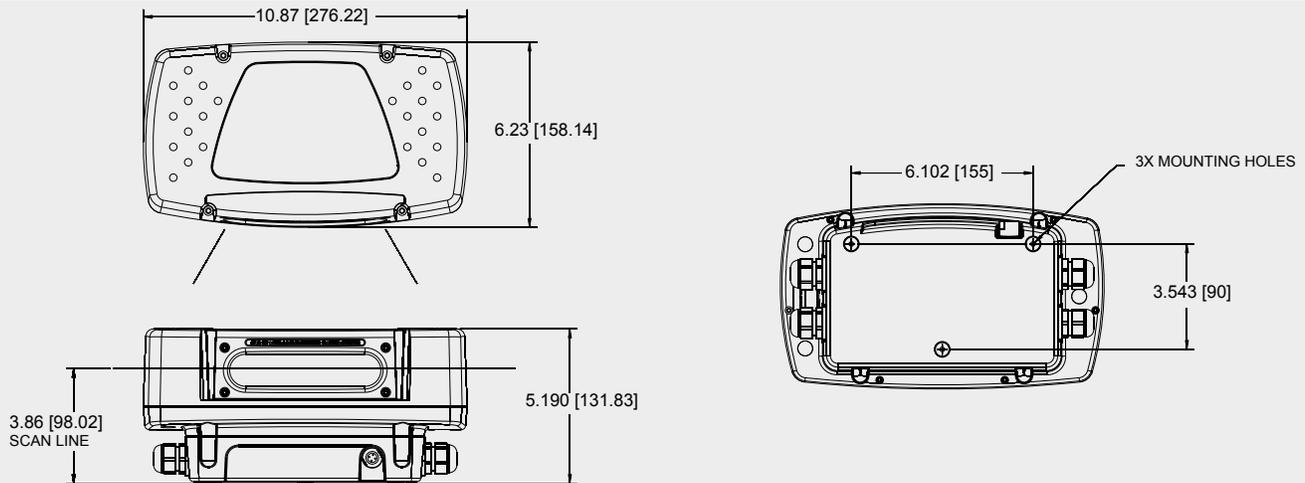
All AXIOMs require a universal wiring base and plug-in scan head. The scan head is available in a high-density version for high-speed scanning in fast moving applications.

Sophisticated technology that's easy to use

Although technologically advanced, AXIOM is designed for easy setup and operation. AXCESS™ setup software provides a familiar user interface, enabling you to configure readers without the need for onsite service. Simply connect to AXIOM via setup cable or on-board Ethernet connection. Specify valid bar codes, groups, and patterns. Define your I/O—including built-in trigger and tach signals and up to four solid state relays. When complete, download your application settings to the reader and you're ready to go.
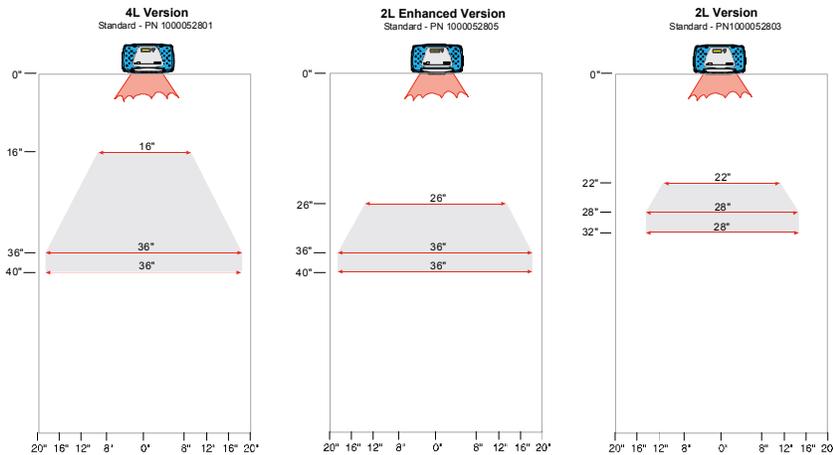
Built-in Parameter Storage Modules store the AXIOM operating parameters in both the scan head and wiring base. In the event replacement ever becomes necessary, just replace the scan head, and the correct parameters are installed with the push a button.
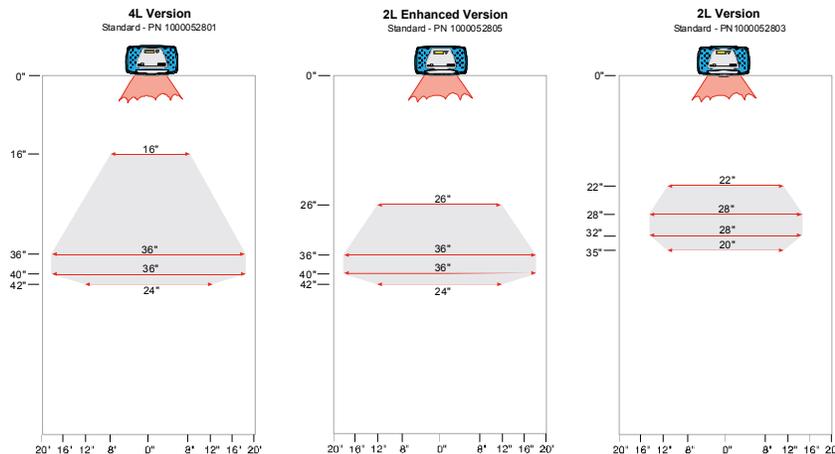
AXIOM

DIMENSIONS

10.87 [276.22]

6.23 [158.14]

3.86 [98.02]
SCAN LINE

5.190 [131.83]

6.102 [155]

3X MOUNTING HOLES

3.543 [90]

READING DIAGRAMS

AXIOM™ High-Density Configurations
(10 mil code size)

4L Version
Standard - PN 1000052801

0"

16"   16"

36"   36"
40"   36"

20" 16" 12" 8'   0"   8" 12" 16" 20"

2L Enhanced Version
Standard - PN 1000052805

0"

26"   26"

36"   36"
40"   36"

20" 16" 12" 8'   0"   8" 12" 16" 20"

2L Version
Standard - PN1000052803

0"

22"   22"
28"   28"
32"   28"

20" 16" 12" 8'   0"   6" 12" 16" 20"

AXIOM™ High-Density Configurations
(12 mil code size)

4L Version
Standard - PN 1000052801

0"

16"   16"

36"   36"
40"   36"
42"   24"

20' 16' 12' 8'   0"   4' 12" 16" 20'

2L Enhanced Version
Standard - PN 1000052805

0"

26"   26"

36"   36"
40"   36"
42"   24"

20" 16" 12" 8'   0"   8" 12" 16" 20"

2L Version
Standard - PN 1000052803

0"

22"   22"
28"   28"
32"   28"
35"   20"

20" 16" 12" 8'   0"   8" 12" 16" 20"

READING DIAGRAMS

AXIOM™ Standard Configurations
(15 mil code size)

4L Version
Standard - PN 1000052800

2L Enhanced Version
Standard - PN 1000052804

2L Version
Standard - PN1000052802
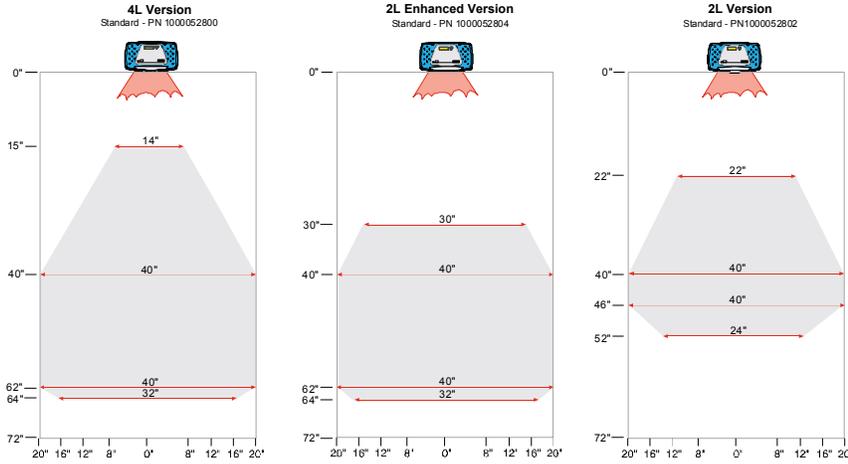
AXIOM™ Standard Configurations
(20 mil code size)

4L Version
Standard - PN 1000052800

2L Enhanced Version
Standard - PN 1000052804

2L Version
Standard - PN1000052802
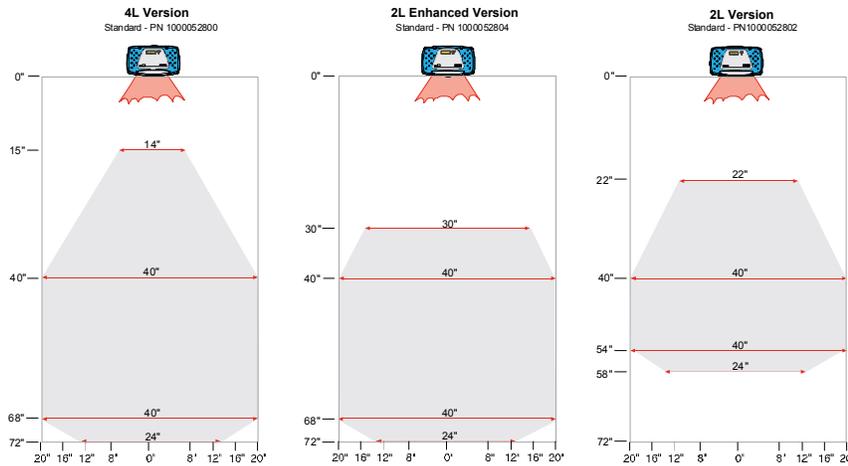
ELECTRICAL CONNECTIONS

▲◣ ACCU-SORT®
WWW.ACCUSORT.COM

AXIOM
BAR CODE SCANNING SOLUTIONS

⚠ ALL TERMINALS MUST BE CONNECTED TO CLASS 2 OR LPS CIRCUITS

ETHERNET

TERM	RJ45	EIA/TIA T568A	EIA/TIA T568B
TX-	PIN 1	WHT/GRN	WHT/ORG
TX-	PIN 2	GRN	ORG
RX+	PIN 3	WHT/ORG	WHT/GRN
RX-	PIN 6	ORG	GRN

TACH

TERM	NPN OUTPUT	PNP OUTPUT	24V
V+		SUPPLY VOLTAGE	
TACH+	JUMPER TO V+	TACH OUTPUT	+OUTPUT
TACH+	TACH OUTPUT	JUMPER TO GND	-OUTPUT
GND		COMMON	

TRIGGER

TERM	NPN OUTPUT	PNP OUTPUT	24V
V+		SUPPLY VOLTAGE	
TRIG+	JUMPER TO V+	PHOTOEYE OUTPUT	+OUTPUT
TRIG-	PHOTOEYE OUTPUT	JUMPER TO GND	-OUTPUT
GND		COMMON	

SERIAL COM

TERM	RS-232	RS-422
TX1	TRANSMIT	TRANSMIT-
TX2	RTS (OPT)	TRANSMIT+
RX1	RECEIVE	RECEIVE+
RX2	CTS (OPT)	RECEIVE-
GND	GND	GND

⚠ REFER TO MANUAL FOR INSTRUCTIONS ON THE USE OF THIS CONNECTOR

OUTPUT POWER
2.5A MAX

SOLID STATE I/O MODULES (OPTIONAL)

I/O 4 | I/O 3 | I/O 2 | I/O 1

⚠

INPUT POWER
12-30VDC
TYP 1.0A @24VDC (SCANNER ONLY)
MAX 5.0A @12VDC (2.5A OUTPUT LOAD)

TECHNICAL DATA

Size L x W x H	158 mm x 276 mm x 132 mm
Weight	Scan Head 3.9 kg, Mounting Bracket: 1.9 kg, Wiring Base 0.8 kg, Power Supply: 1.1 kg
Enclosure	Powder-coated cast aluminum, rated for IP65
Temperature Operating	0° bis 50° C
Temperature Storage:	-20° bis 70° C
Relative Humidity	10% - 90% non-condensing
Laser Type	Visible laser diode 650 nm (standard)
Power Requirement	12-30 VDC (power supplies available from Accu-Sort)
Power Consumption	< 40 W
Visual Indicators	Status, Trigger, Read, RX/TX, Network, Link; read quality (5 LEDs)
Bar Code Types	All standard 1D symbologies
Communications Standard	On-board EtherNet/IP, Ethernet TCP/IP, Serial RS232, RS422, and 4 programmable I/O relays
Communications Optional	DeviceNet, Profibus
Options	100 or 240 VAC power supply; heater
MTBF	> 72,000 hours
Service Options	Installation assistance and on-site training
Compliance	UL, cUL, CE, FCC (Class A), 21CFR1040, IEC-60825-1

MODELS

ORDER NO.	DESCRIPTION
1000052800	AXIOM 4L, 4 LASER, STANDARD
1000052801	AXIOM 4L, 4 LASER, HIGH DENSITY
1000052802	AXIOM 2L, 2 LASER/1 MODULE, STANDARD
1000052803	AXIOM 2L, 2 LASER/1 MODULE, HIGH DENSITY
1000052804	AXIOM 2L ENHANCED, 2 LASER/2 MODULES, STANDARD
1000059582	AXIOM 2L ENHANCED, AIRPORT, 2 LASER/2 MODULES
1000052805	AXIOM 2L ENHANCED, 2 LASER/2 MODULES, HIGH DENSITY
1000069656	AXIOM SCANNER,2-LASER 2-MODULE,45 DEGREE,STANDARD DENSITY
1000069657	AXIOM SCANNER,2 LASER 2-MODULE,45 DEGREE,HIGH DENSITY
1000052807	AXIOM 1L, STANDARD
1000052809	AXIOM 1L, HIGH DENSITY
1000070081	AXIOM 1-LASER,ENHANCED,STANDARD DENSITY
1000070082	AXIOM 1-LASER,ENHANCED,HIGH DENSITY

ACCESSORIES

WIRING BASES	
0104636001	ASSY, AXIOM WIRING BASE (US VERSION)
1000069265	AXIOM/AXIOM-X,PRE-ASSEMBLED,DOMESTIC WIRING BASE/IP40 POWER SUPPLY/UNIVERSAL MOUNTING BRACKET
1000069266	AXIOM/AXIOM-X,PRE-ASSEMBLED,INTERNATIONAL WIRING BASE/IP40 POWER SUPPLY/UNIVERSAL MOUNTING BRACKET
1000069267	AXIOM/AXIOM-X,PRE-ASSEMBLED,DOMESTIC WIRING BASE/IP65 POWER SUPPLY/UNIVERSAL MOUNTING BRACKET
1000069268	AXIOM/AXIOM-X,PRE-ASSEMBLED,INTERNATIONAL WIRING BASE/IP65 POWER SUPPLY/UNIVERSAL MOUNTING BRACKET
PROGRAMMING CABLES	
1000007308	CABLE, ADAPTASCAN SERIES B 8 FT PROGRAMMING
DISCRETE I/O MODULES	
1000056135	KIT, 3.3-32VDC INPUT MODULE
1000056136	KIT, 3-60VDC OUTPUT MODULE
1000056137	KIT,AXIOM 12-42VAC OUTPUT MODULE
MOUNTING EQUIPMENT	
0105307002	KIT, AXIOM MOUNTING BRACKET WITH POWER SUPPLY ADAPTER
0106226002	KIT,AXIOM X-MOUNTING BRACKET WITH POWER SUPPLY ADAPTER
0111236001	MOUNTING FRAME, STANDARD, SIDE READ, AXIOM & AXIOM-X
0110352001	MOUNTING STRUCTURE,STANDARD,TOP READ,AXIOM/AXIOM-X
0111849001	MOUNTING STRUCTURE,STANDARD,FRONT/BACK READ,AXIOM

POWER SUPPLY

0105365001	40 WATT 24V POWER SUPPLY (DOMESTIC)
0105365002	40 WATT 24V POWER SUPPLY (INTERNATIONAL)
0112591001	KIT,POWER SUPPLY,40W,IP40,DOMESTIC,AXIOM/AXIOM-X
0112591002	KIT,POWER SUPPLY,40W,IP40,INTERNATIONAL,AXIOM/AXIOM-X

TACHOMETER

1000019875	TACHOMETER, PROGRAMMABLE W/20FT CABLE 8-30VDC
1000020567	KIT, TACHOMETER BRACKET GENERAL MOUNTING

PHOTO EYE

1000020569	KIT, FLYING LEAD PHOTO EYE Flying Leads, may also be used for start trigger PE in Start/End Trigger Appl
1000063534	KIT,HEIGHT TRACKING PHOTOEYE,1 PHOTOEYE,1 INPUT MODULE,AXIOM-X 4 ZONES order qty 3; 3 ZONES=qty 2

BLOWER ASSEMBLIES

0106318001	ASSY, BLOWER 120 VOLT AXIOM
0106318002	ASSY, BLOWER 230 VOLT AXIOM

SCANNER UPGRADES

0111328001	CABLE ASSEMBLY, AXIOM TO QUAD-X & XLT200 ZONE
0111329001	CABLE ASSEMBLY, AXIOM TO QUAD-X, XLT200, MINI-X, M24I COMM
0111330001	CABLE ASSEMBLY, AXIOM TO MINI-X & 24I TACH
0111331001	CABLE ASSEMBLY, AXIOM TO MINI-X & 24I TRIGGER
0111332001	CABLE ASSEMBLY, AXIOM TO MINI-X & 24I ZONE
0111333001	CABLE ASSEMBLY, AXIOM TO QUAD-X & XLT200 TACH NPN
0111334001	CABLE ASSEMBLY, AXIOM TO QUAD-X & XLT200 TACH 24V
0111335001	CABLE ASSEMBLY, AXIOM TO QUAD-X & XLT200 TRIGGER NPN
0111336001	CABLE ASSEMBLY, AXIOM TO QUAD-X & XLT200 TRIGGER +24V
0113601020	CABLE ASSEMBLY STACK LIGHT TO AXIOM I/O CABLE
0113607020	CABLE ASSEMBLY AXIOM TO SCAN GUN COM CABLE
0113608020	CABLE ASSEMBLY AXIOM TO QUAD RELAY BOX DIGITAL I/O CABLE

MUXLESS AIRPORT

1000065024	HEARTBEAT CABLE ASSEMBLY,8FT
1000065025	REMOTE DISPLAY CABLE ASSEMBLY,15FT
1000065026	STACKLIGHT CABLE ASSEMBLY
1000020542	MATING CONNECTOR FOR HOST CABLE, 25-PIN MALE CE D CONNECTOR, SOLDER
0111400001	CABINET ASSEMBLY, AIRPORT DISTRIBUTION BOX (INTERNATIONAL)
0111400004	CABINET ASSEMBLY, AIRPORT DISTRIBUTION BOX (DOMESTIC)
1000051919	KIT,115VAC POWER CORD W/FLYING LEADS,20FT
1000051920	KIT,220VAC POWER CORD W/FLYING LEADS,20FT (NOT USED WITH AIRPORT DISTRIBUTION BOX)
1000016277	40 CHARACTER EXTERNAL DISPLAY
1000016280	ASSEMBLY, POWER SUPPLY, 120V, EXTERNAL DISPLAY
1000016283	ASSEMBLY, POWER SUPPLY, 220V, EXTERNAL DISPLAY (NOT USED WITH AIRPORT DISTRIBUTION BOX)
1000064910	ROUTER,8-PORT SWITCH,10/100 ETHERFAST
1000063529	CABLE,7FT,CAT5,RJ-45M TO RJ-45M,CROSSOVER,BLACK,NETWORK

MIRROR ASSEMBLY

0102909001	ASSEMBLY,PERISCOPE FOLDING MIRROR, 12 IN.
0102623003	ASSEMBLY,3/8IN X 28IN,FLOAT GLASS,DUAL LOCK,FOLDING MIRROR

NETWORK CONNECTIONS

1000057419	SWITCH,WORKGROUP,8 PORT,ETHERFAST,10/100
1000059304	SWITCH,5-PORT ETHERNET 10/100 DUAL SPEED
1000051570	CABLE,10FT CAT5 RJ-45M TO RJ-45M CROSS-OVER GREY NETWORK
1000051571	CABLE,20FT CAT5 RJ-45M TO RJ-45M CROSS-OVER BLUE NETWORK
1000059543	CABLE,RJ45 IP65,4M,BLACK
1000059541	KIT,RJ45,ADAPTER,AXIOM
1000060201	KIT,RJ45 ADAPTER, METRIC

QUAD RELAY BOX

1000071073	KIT,QUAD RELAY OUTPUT,AXIOM
1000017698	QUAD RELAY BOX
1000018663	MODULE,SINGLE DC OUTPUT 5-60V,3A MAX,RED
1000018666	MODULE,DRY CONTACT OUTPUT 130VAC,0.5A,NORMALLY OPEN
1000016570	MODULE,SINGLE DC INPUT 10-32 VOLTS,WHITE
1000016566	MODULE,SINGLE AC INPUT 90-140 VOLTS,YELLOW
1000018299	KIT,4PK,1/4-20 EXTRUSION MOUNTING HARDWARE