CiMatrix is a world leader in the creation of one and two-dimensional bar code readers and data collection systems for automatic identification in materials handling and manufacturing applications. The CiMAX® 7800 and 7850 are intelligent fixed position laser scanners for applications requiring high scan rates and large depth of field. The auto-focus capability makes these scanners ideal for sorting applications with packages of varying size. An on-board processor allows for local programmability and control. An optional Ethernet interface enables distributed, networked processing.

Overview

CiMAX® 7800/7850

Intelligent, High Performance Auto-Focus Scanners

High scan rates and large depth of field for high-speed sortation and tunnel systems

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Features/Benefits

- Integrated scanner and decoder
- Auto-focus capability
- Up to 700 scans/second at 60° scan angle
- Large range and big depth of field
- “C” programmable
- Starnode™ or optional Ethernet interface
- Programmable digital I/O - 8 inputs/8 outputs
- CiX® (Code Information eXtraction) Technology
- Front (7800) or side view (7850) versions
- Ease of installation & troubleshooting
- Scan packages of varying heights
- High throughput & reading reliability
- Adapt to a variety of installations
- Minimize post-processing of data and need for external controllers
- Open architecture, connects to factory network
- Control flexibility
- Increased ability to read damaged, small or tilted labels
- Easier mounting in small places
### Specifications

#### Physical
- **Dimensions**
  - 7800 - 6.5"H x 12.75"L x 4.62"W (16.5 x 31.8 x 11.7 cm)
  - 7850 - 6.5"H x 14.38"L x 4.62"W (16.5 x 36.5 x 11.7 cm)
- **Weight**
  - 13 lb. (5.9 kg)
- **Case Material**
  - Epoxy Powder Coated Aluminum, NEMA-12 dust tight and drip proof

#### Operational*
- **Light Source**
  - Class II Visible Laser Diode
- **Min. Resolution**
  - 10 mil.
- **Max. Scan Rate**
  - 700 scans/second
- **Min. Reading Distance**
  - (20 mil. code) 20 inches
- **Max. Reading Distance**
  - (20 mil. code) 70 inches
- **Max. Depth of Field**
  - (20 mil. code) 50 inches
- **Scan Angle**
  - 60 degrees
- **Readable Codes**
  - Code 39, 128, I 2 of 5, UPC, EAN & Codabar

*Actual operational specifications are optimized for each application during factory configuration

#### Interface/Control and Communications
- **Digital Inputs**
  - 8, 30 VDC max.
- **Digital Outputs**
  - 8, 30 VDC at 150 mA max.
- **Status LEDs**
  - 6, monitor power, operations and communications
- **Communications**
  - 1 Asynchronous serial host port - RS-422 or RS-232
  - 1 Asynchronous serial terminal port - RS-232
  - 1 LAN port with Starnode protocol - RS-485
  - 1 Ethernet port 10 base 2 connection (optional)
- **Set-up and Diagnostics**
  - Via Terminal port using CiMAX 1400 or PC
- **Process Control**
  - 32-bit processor with 256K/1MB non-volatile RAM programmable in C language

#### Environment
- **Power**
  - 12 VDC ± 5%, 2A, 5 VDC ± 5%, 1A
- **Operating Temperature**
  - 32° to 122°F (0 to 50 ± C)
- **Humidity**
  - 5% to 95% non-condensing
- **Protection**
  - NEMA 12 / IP65
- **Approvals**
  - CE

### Options
- **CIX® Technology**
- **Ethernet Interface**
- **Interface Box with provisions for isolation and connections to Opto-22 style solid state relays**

Specifications subject to change without notice.

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**Applications**

The CiMAX 7800 and CiMAX 7850 offer excellent performance in demanding applications.

Typical applications include:
- Materials handling systems
- High speed sortation
- Baggage and parcel handling
- Warehousing and order picking
- Intelligent conveyors
- Automated distribution

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