Long Range Raster Scanner Designed for Industrial Applications

Adjustable raster and scan area via oscillating mirror/stepper motor allows various positioning of bar code to be captured with the same orientation.

Rugged aluminum case for NEMA 12 environmental protection in harsh environments and maximum EMI and RFI suppression (upgradable to NEMA 4).

Programmable match code instructions for up to twenty codes with variable time-outs and beam tracking.

System status and/or drive peripheral equipment with two inputs and four outputs through simple open user programmable firmware for maximum system adaptability.

Programmable firmware via RS232, RS422 and RS485 communication protocols.
**MECHANICAL ENVELOPE/MOUNTING**

Measurements in inches (centimeters)

Front:

- Front: 2.15" (5.5)
- 3.5" (8.89)
- 5.3" (13.46)
- Back: 6.75" (17.15)

Back:

- Side: 3.1" (7.87)
- 4" (10.16)
- 6.75" (17.15)
- 10.4" (26.42)

**ELECTRICAL TERMINATION**

DB-15 Connector (Female)

1. Input 1 (spare)
2. Input 2 (spare)
3. Good Read Output (open collector 48ma)
4. No Read Output (open collector 48ma)
5. Good Compare Output (open collector 48ma)
6. No Compare Output (open collector 48ma)
7. Input 3 (spare)
8. Gate Input (photoeye input)
9. 5v DC Out
10. 12v DC Out
11. Open collector output (spare)
12. Open collector output (spare)
13. Sync
14. Open collector (spare)
15. Ground

DB-9 Connector (Female)

1. -TX (RS422)
2. RD
3. TD
4. -RX (RS422)
5. Ground
6. TX (RS422)
7. RTS
8. CTS
9. RX (RS422)

5 Pin DIN Connector

1. Ground
2. NC
3. +5v DC
4. -12v DC
5. +12v DC

**POWER REQUIREMENTS**

+5v DC@400ma
+12v DC@250ma
-12v DC@250ma

**ENVIRONMENTAL**

Enclosure: Aluminum extrusion, NEMA 12 rating

Operating Temperature: 32°F to 104°F (0°C to 40°C)

Relative Humidity: 0 - 95% noncondensing

**OPTICAL CHARACTERISTICS**

Illumination: 5mw solid state laser diode or 10mw solid state laser diode

Wavelength: 670nm (nominal)

Sweep Speed: 3-24 sweeps per second

Sweep Angle: 30° max.

Scan Element: Rotating polygon (8 or 12 sided) mirror

Scan Speed: 500 scans/second typical

Read Range: 2 to 60 inches - label dependent

Depth of Field: Dependent of focal point, spot size and narrow element bar width

**LABEL ORIENTATION**

Scan Angle: 60 degrees
Scan Pitch: 45 degrees
Scan Skew: 45 degrees

**MECHANICAL ENVELOPE/MOUNTING**

Enclosure: Extruded aluminum, painted

Weight: 7.5 lbs.
STANDARD FEATURES

Motor:
Long life brushless motor

Mirror:
Diamond machined, gold plated aluminum

Coaxial Optics:
Maximum ease of set-up

Detector Board:
Oversized precision optics, ambient light & polarizing filters

Aluminum Case:
Max EMI/RFI protection

Firmware:
User programmable

FACTORY OPTIONS

Scan Speed:
Adjustable from 250 to 1000 scans/second

Focal Point:
Adjustable for spot size and narrow element

Raster Pattern:
Standard .1” at 10”, or machined to specific application

Electrical Termination:
Cabling as required

Light Source:
Standard 670nm, optional 780nm 5mw or 10mw laser diode

Symbologies:
Specials available depending on qty.

Firmware:
Custom configurations

Environmental:
Standard NEMA 12, upgradable to NEMA 4

Auto focus:
Three variable focal points with 50m Sec. response time

CERTIFICATIONS

Laser Classification:
DHHS Class II

UL and CE marks submitted

WARRANTY

Parts and Labor: One year