Inspector Pro

PC-based Machine Vision Software

RoHS COMPLIANT 2002/95/EC FCC CE

Features

- Highly-integration smart software for machine vision
- Support mono/color GigE CCD camera
- Support 24-ch digital input/output function
- Flexible graphical user interface
- Graphical point and click program construction enables rapid prototyping
- Versatile Region Of Interest options for processing flexibility
- Direct support for factory protocols including Ethernet/IP, Modbus and Udp/IP
- Full featured API for custom operator interface design
- Scripting provides integration flexibility and custom control
- Monitor and reporting windows provide immediate status feedback
- Instruction tool bars allow quick access to program functions
- Built-in editing and debug tools

Introduction

Inspector Pro is an advanced machine vision software interface that can be applied to a wide variety of automated inspection applications. It offers maximum design flexibility and provides a rich suite of proven tools and capabilities in detecting defects early in the manufacturing cycle to increase productivity and reduce production costs.

Feature Details

General

- **Regions of Interest (ROI) Processing shapes:**
  Flexible Area and Line ROI selection; Rectangle, Annulus, Polygon, Torus, Circle, Arc, Point, Polyline, Rake, Rainbow, Bulls-eye and Spoke
- **Preprocessors:**
  Extensive set of conditioning functions that can be applied to a ROI prior to analysis
- **Positioning Tools:**
  Advance pattern finding tools for object alignment and robot guidance.
- **Measurement Tools:**
  Precise tools for computing the dimensions on a variety of parts and shapes
- **Analysis Tools:**
  Tools for finding and counting edges, extracting and analyzing features, detecting contrast variation and performing statistical analysis
- **Calibration Tools:**
  Correct for linear, nonlinear and perspective image distortion. Convert camera pixel to real-world coordinates
- **Color Tools:**
  Learn colors for monitoring, classifying, sorting, tracking and counting objects
- **Reader (Identification) Tools:**
  Reads and verifies 1D and 2D codes. Reads and identifies printed, molded or stamped text (OCR)
- **Script Tools:**
  JavaScript based scripting tool, complete with drag-and-drop instruction editing, allows you to develop custom formulas or inline and background operations
- **Custom Algorithms :**
  Unique inspection requirements? No problem! Sherlock allows you to add your favorite custom algorithm into the development environment.
- **Custom Interface :**
  OCX for designing custom operator interface using Visual Basic or Visual C

GigE Camera Specification

- **Resolution** 640x480~1600x1200
- **Frame rate** 15~64FPS
- **Pixel size** 4.4um~7.4um
- **Dimensions** 44 mm x 29 mm x 67 mm
- **I/O** 2 general purpose opto-isolated I/O
- **Input voltage** 12~24V
- **Power consumption** 4W
- **Operating temperature** 0~45°C
- **Lens** Supports a standard C mount lens

DI/O Specification

- **I/O** 24
- **Programming mode** 8255 PPI mode 0
- **DO** Logic level 0: 0.4Vmax. @ 24mA (sink)
  Logic level 1: 2.4 V min. @ 15mA (source)
- **DI** Logic level 0: 0.4Vmax.
  Logic level 1: 2.4 V min.
- **Compatibility** 5 V/TTL
- **Power consumption** 5 V @ 300 mA (max.)
- **Operating temperature** 0~45°C

Ordering Information

Inspector Pro

- **AIN-PR-USBE** Inspector Pro with USB Dongle

Genie Camera

Monochrome Series

- **GCAM-GM0640-001CE** 640x480 , 64FPS, C-mount
- **GCAM-GM1360-003CE** 1360x1024, 22FPS, C-mount
- **GCAM-GM1600-002CE** 1600x1200, 15FPS, C-mount
- **GCAM-HM0640-002CE** 640x480, 300FPS, C-mount
- **GCAM-HM1024-002CE** 1024x768, 117FPS, C-mount

Color Series

- **GCAM-GC0640-001CE** 640x480, 64FPS, C-mount
- **GCAM-GC1360-003CE** 1360x1024, 22FPS, C-mount
- **GCAM-GC1600-002CE** 1600x1200, 15FPS, C-mount
- **GCAM-HC1024-002CE** 1024x768, 117FPS, C-mount

Accessories

- **GCAB-GIO-3M-TD1E** Genie camera Power/Trigger/IO cable, 1m
- **GCAB-GIO-5M-TD1E** Genie camera Power/Trigger/IO cable, 2m
- **GCAB-GIO-10M-TD1E** Genie camera Power/Trigger/IO cable, 3m