

## Vision Appliance for Product and Assembly Verification

### Overview

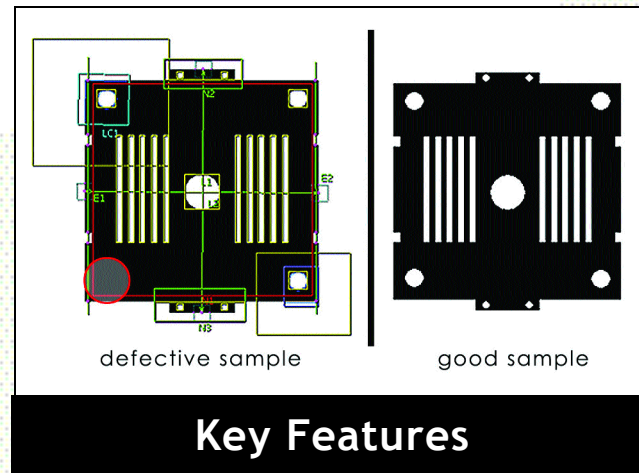
iCheck is an optical inspection appliance that is used for checking the assembly and correctness of products within a manufacturing or production environment. It is a simple-to-use device that can be quickly applied to a diverse range of applications across multiple industries.

As part of the family of ipd Vision Appliance products, iCheck is a pre-packaged solution designed to simplify the deployment of machine vision in industrial applications. The intuitive, user-friendly interface allows you to initiate and create custom inspections in a matter of minutes. No extensive training or expensive setup required!

Like all of our products, iCheck is built upon robust and proven technologies. We have utilized our long corporate history of providing imaging hardware and software to develop practical solutions that are easy to use and fast to deploy. With Vision Appliances, you spend less time learning and more time realizing improved quality in your production environment.

Typical iCheck applications include:

- Detect missing or incorrect products in a package
- Check presence and alignment of labels
- Check cap and safety seals
- Detect and verify barcodes
- Verify the presence and size of holes in a machined part
- Verify the correct number and size of pills in a blister
- Verify the number and spacing of pins on a connector
- Verify number and spacing of teeth on a gear
- Measure the diameter and circularity of a pipe
- Detect stains, cracks or deformities on a surface



### Key Features

- Ideal for a wide range of product assembly or verification applications
- Designed to be installed and operated by a manufacturing engineer
- Local and remote access for production monitoring
- Easy to configure and deploy
- Assures a rapid return on investment

# Specifications

## Memory

- Stores up to 16 inspection (solution) files

## Acquisition

- Progressive scan analog camera (640 x 480)
- Rapid-reset, full-frame integration
- 30 frames/second, exposure controlled

## Digital Inputs

- 5 opto-isolated solution selection inputs:
  - 16 unique solution codes & change solution strobe
- 2 opto-isolated trigger inputs:
  - Sensor trigger to signal part-in-place for inspection
  - Decision trigger to signal inspected part-in-place for decision control
- ON: 2-25V differential (2-50mA turn on current)
- OFF: 0.8V max differential
- Pulse width 10 uS (minimum)

## Digital Outputs

- 3 opto-isolated inspection result outputs (pass, fail, and rework)
- 1 opto-isolated light control strobe
  - Generated from Sensor trigger
  - Offset and duration programmable
- Outputs support pull-up and pull-down configurations
- Voltage range 2-25 V
- Current sourcing or sinking (sourcing only with Breakout board)
- Maximum current rating 5 mA

## Network

- 10/100 BaseT Ethernet, IEEE 802.3 compatible
- Supports DHCP and static IP (factory default) address
- RJ-45

## RS-232 Communication

- 1 TX/RX port
- 9-pin DSUB available on breakout module

## Display

- Via Ethernet monitor

## Power

- 24 VDC +/- 10%
- 0.75A Typical, 1A Maximum

## Environment

- Operating Temperature, 0 - 45 °C (32 - 113 °F)

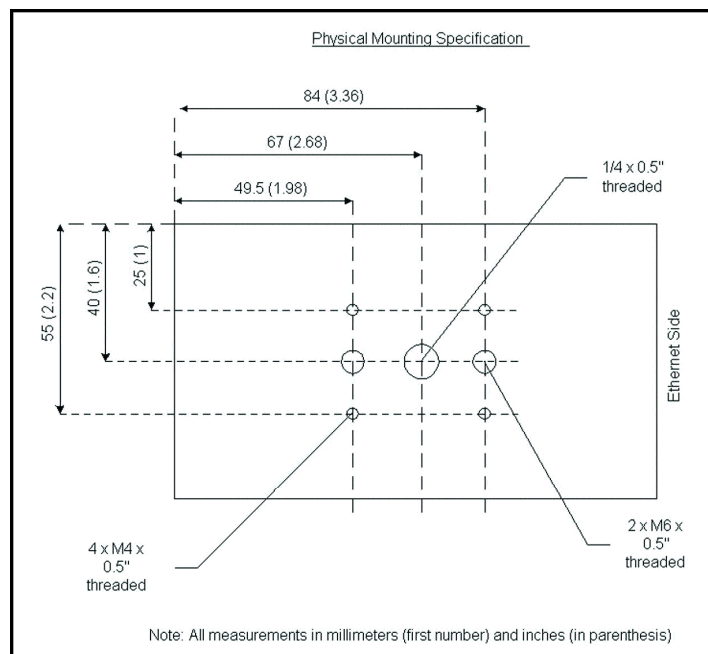
- Storage Temperature, -20 - 70 °C (-4 - 158 °F)
- Maximum Relative Humidity, 90% non-condensing

## Certifications

- European CE

## Mechanical

- Cast aluminum, no moving parts, fans or disk drives
- 7 threaded holes on the underside for mounting (see diagram)
- Dimensions: 75 mm (W) x 68 mm (H) x 130 mm (L)
- Weight: 2 lb.
- DIN rail mount available



## User Interface

- All required software is resident on the Appliance
- User interface is through standard Microsoft browser

## Tools Included

- Locate, area count, edge count, intensity, line distance, diameter, circularity, angle, barcode verify, surface flaw

## Run-time Interface

- None required

## Breakout Module (option)

- Breakout opto-I/O to single ended terminal connections
- Breakout serial port



To learn more about iCheck, see our website at [www.goipd.com/products/appliances](http://www.goipd.com/products/appliances)

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