PresencePLUS® Pro

BANNER

PresencePLUS® COLOR

PresencePLUS®

- Full-function vision sensor with a compact camera and separate controller

- Removable terminal block

- Metal IP68-rated camera and integrated light for inspections in dirty or washdown conditions

- Complete set of inspection tools available such as location and analysis, pattern count…

PresencePLUS® P4
OMNI

- Full-function colour vision sensor in a compact, self-contained housing

- P4 OMNI: multi-function vision sensor that combines all the P4 inspection tools (EDGE, GEO, AREA & BCR)
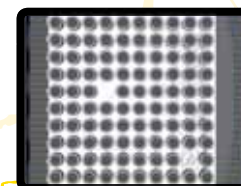- Compact, self-contained housing

- P4 EDGE: Finding dark-bright transitions

- P4 GEO: Geometric recognition in any orientation

- P4 AREA: Finding dark and bright spots

- P4 BCR: Datamatrix and Barcode reading

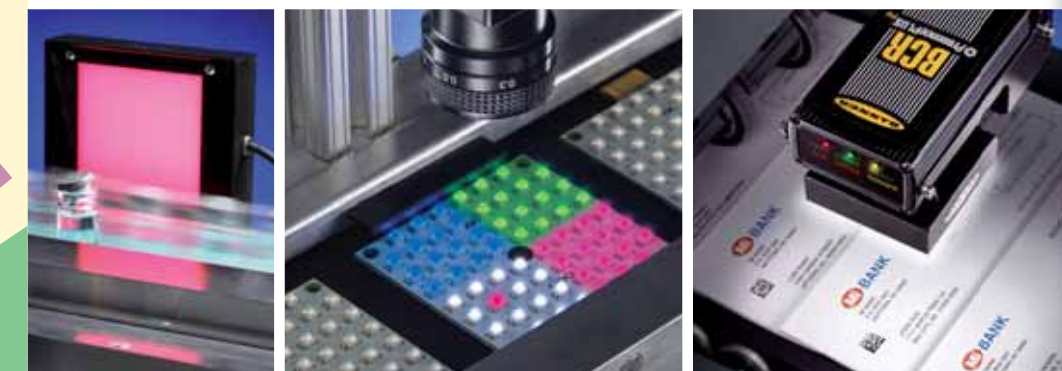- Full-function colour vision sensor with a compact camera and separate controller

EDGE **GEO** **AREA** **BCR**

IP68 SEALED

Rivet Detection

Bottle Label Alignment

CD Rotation

Blister Verification

Datamatrix Detection

Coloured Fuse Detection

TEACH

APPLE

BANNER

Vision functions

- All models include locate, measurement, test and communications tools
- Specific vision tools include Edge, Blob, Geometric pattern recognition, average greyscale, greyscale correlation, colour matching and Datamatrix code reading, depending on model type

- Graphically develop your application on a single reference image
- Common user interface for all devices
- ActiveX based utilities to control the sensor and archive images
- Easy-to-use software in nine different languages available, such as: German, French, Italian, …

Graphical User Interface

Communication

- 4 or 6 I/O lines, configurable for input or output, PNP or NPN
- Image and data export over RS232 serial port, TCP/IP, MODBUS/TCP, Ethernet/IP
- Dedicated input lines allow selecting the active inspection from multiple stored inspections
- Provides a real-time representation of the captured image

- External TEACH function allows easy adjustment of inspection parameters, based on a sample

TEACH Input

BANNER ®

Presence PLUS Vision Sensors

- Complete range of Banner lighting options
- C-mount lenses available for standard, high-performance and megapixel imagers

Accessories

Resolution

- *Presence* PLUS *Pro*: CCD 640 x 480 pixels
- *Presence* PLUS *P4* EDGE, GEO & AREA: CMOS 128 x 100 pixels or 1280 x 1024 pixels
- *Presence* PLUS *P4* OMNI & *P4* BCR: CCD 640 x 480 pixels or CMOS 1280 x 1024 pixels
- *Presence* PLUS COLOR: RGB colour CMOS 752 x 480 pixels

Presence PLUS

Accessories

Optics

A big selection of standard or high-performance lenses

Colour or infrared filters & polarisation filters

Diffusers and polarisation filters for Area and Ring lights

Laser Line Projectors

Class II red laser, available with vertical or horizontal line, cross or circle

Tubular Fluorescent Lights

For illumination of large objects, models with internal or external ballast available

Lighting

Standard Lighting   *Sample piece*

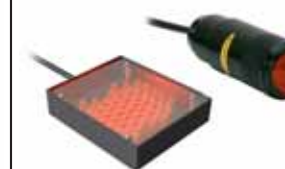| Ring Lights	Backlights	Area & Spot Lights
Provides bright illumination for smaller objects and eliminates glare of shiny objects when using optional polarising kits	Highlights through-holes in target objects and give optimal contrast for contour verification	Lights objects under a specific angle, creating shadows or avoiding glare

Advanced Lighting

On-Axis Lights	Low Angle Ring Lights	Highly Diffused Lights
Provides an even illumination over the covered area and enhances the contrast between surface texture differences	Highlights surface irregularities such as dust and scratches, creates shadows and hot spots on elevated parts	Eliminates glare and shadows, illuminates curved surfaces evenly and minimises texture

Monitors & Housings

Flat panel monitor

IP40 Housing for camera
IP67 Housing for vision sensor

Brackets

Mounting bracket assembly for *Presence* PLUS *Pro* Camera

Swivel mounting bracket for *Presence* PLUS *P4*

Mounting brackets to fix lights to the *P4* sensor

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