# FSI Technologies Inc. ESN 810 Smart Camera



### The System

The ESN 810 is a complete machine vision system suitable for stand-alone operation. It combines powerful smart camera hardware with world-class standard EyeVision machine vision software. One of the smallest (80 X 45 X 20 mm) smart cameras on the market today, the ESN 810 can be used in countless industrial applications.

#### **Software**

The software engine, EVT, is a cutting-edge leader in machine vision software and has been in existence for over 20 years. EVT software has been used world-wide and is fully supported. Because it is highly scalable, EVT software can be used in anything from Smart Cameras to multicamera high resolution systems. Its extensive set of machine vision tools makes this software second to none.

#### Hardware

The hardware, Vision Components, is also a world leader in machine vision. The ESN 810 camera has a resolution of 752 X 480 pixels, operates at 60 frames per second (full resolution), has Ethernet interface capabilities, discrete I/O, global shutter and 128 MB of image/data memory.

#### **Benefits**

The ESN 810 is ideal for industrial applications. Built to resist shock and vibration, it has multiple I/O lines for direct control of external equipment. Because of its tiny size, the ESN 810 is perfect for applications with minimal space. Best of all, the ESN 810 can be an economical solution for your company's machine vision needs.

The ESN 810 is brought to you by a team you can count on:

## FSI Technologies Inc.

Trusted manufacturer of factory automation products for over 50 years. We provide a full range of software training & support.

## **Eye Vision Technology AG**

Machine Vision software design for over 20 years

## **Vision Components GmbH**

One of the world leaders in Smart Cameras (over 78,000 installed worldwide)

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## **ESN 810 Technical Specifications**

Specifications	ESN-810
Sensor	1/3" CMOS
Resolution	752 x 480 Pixels
FPS	60 fps at full resolution
Interface	Ethernet 10/100 Mbit TCP/IP
I/O	2 inputs / 4 outputs, 24V, outputs 4 x 400 mA, 1 picture trigger input, 1 flash trigger output (24 V)
Dimension	Approx. 80 x 45 x 20 mm, approx. 90 g
	High-Speed: 31, 25µs
Shutter	Low-Speed: Up to 2 s adjustable integration time
Integration	Global Shutter
Acquisition	Asynchronous, program controlled or external trigger, full frame & partial scanning (AOI), acquisition jitterfree
A/D Conversion	1 x 27 MHz / 10 bit
Processor	5600 MIPS, 700 MHz Texas Instruments TMS320C64xx
Image Output	Via 100 Mbit Ethernet onto PC
Image / Data Memory	128 MB DDRAM
Flash Memory	32 MB Flash EPROM (non volatile memory) for programs and data, programmable in the system
Operating Voltage	24 V +/- 20% DC, max. 300 mA
Electric Connectors	I/O (DC In, PLC, 12-pin), Ethernet (6-pin)