



S100 Series

Compact Smart Camera

High Performance: Dual Core Cortex-A9 processor and Xilinx FPGA

IP-67 Rated enclosure

Programmable FPGA for image acquisition and preprocessing



Multiple resolution: VGA, 2 and 4 Megapixels global shutter CMOS image sensor

Compact size: only 45x45x41 mm

Open system with Linux O.S.

High speed acquisition: up to 250 fps for VGA resolution

Complete interface and communication capabilities: Gigabit Ethernet, digital I/O, RS232/485 serial ports



Smart & Fast Inspection

▼ **High-Speed acquisition**

The S100 allows high-speed acquisition, from 250 Fps for VGA sensor up to 35 Fps for 4 megapixels sensor.

The frame rate of the camera can be further increased thanks to the windowing features: capturing only a portion of the sensor allows higher frame rates for smallest regions of interest.

▼ **FPGA**

The image acquisition and image preprocessing are performed by dedicated FPGA in real time.

Using graphical tool, it is possible to program the FPGA for image preprocessing.

▼ **Interface and Communication**

The integration of the S100 Smart Camera is made easy by the full-featured set of interfaces available: Gigabit Ethernet, RS232, RS485, 2 inputs, 2 outputs, 2 strobe outputs.

▼ **Architecture**

The S100 Smart Camera features a Dual Core Cortex-A9 800MHz CPU and an Xilinx Artix 28K Logic Cells FPGA working closely together.

Thanks to Tattile's technology based on FPGA, this smart camera can guarantee the real-time execution of critical functions such as image capture, image pre-processing, and I/O.

▼ **Compact size**

Thanks to its compact size, it can be easily integrated into any machine and production line.

▼ **Open System**

Thanks to the use of Linux O.S., it is possible to develop Vision Application with Tattile software or third parties library / software.

▼ **IP-67**

IP-67 rated housing of S100 Smart Camera allows the installation even in harsh environment.



S50 Series

Compact Smart Camera

Best Performance: Single Core Cortex-A9 processor and Xilinx FPGA

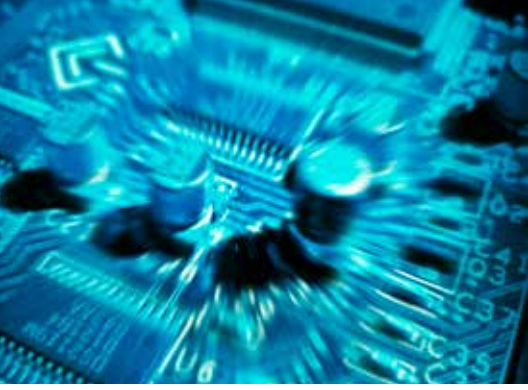
VGA global shutter CMOS image sensor

IP-67 Rated enclosure

Compact size: only 45x45x41 mm

Open system with Linux O.S.

Complete interface and communication capabilities: Gigabit Ethernet, digital I/O, RS232/485 serial ports



▼ **Smart solution**

With a VGA resolution and a speed of 120 frame per second, S50 Smart Camera is suitable for all vision system application.

The frame rate of the camera can be further increased thanks to the windowing features: capturing only a portion of the sensor allows higher frame rates for smallest regions of interest.

▼ **FPGA**

The image acquisition and image preprocessing are performed by dedicated FPGA in real time.

▼ **Open System**

Thanks to the use of Linux O.S., it is possible to develop Vision Application with Tattile software or third parties library / software.

▼ **Architecture**

The S50 Smart Camera features a Single Core Cortex-A9 800MHz CPU and an Xilinx Artix 28K Logic Cells FPGA. Thanks to Tattile's technology based on FPGA, this smart camera can guarantee the real-time execution of critical functions such as image capture, image preprocessing, and I/O.

▼ **IP-67**

The IP-67 rated housing of S50 Smart Camera allows the installation even in harsh environment.

▼ **Interface and Communication**

The integration of the S50 Smart Camera is made easy by the full-featured set of interfaces available: Gigabit Ethernet, RS232, RS485, 2 inputs, 2 outputs, 2 strobe outputs.

▼ **Compact size**

Thanks to its compact size, it can be easily integrated into any machine and production line.



S50 / S100 Series

Compact Smart Camera



Smart & Fast Inspection

Technical Data

Device	S50	S110	S120	S130
Resolution	640x480	640x480	2048x1024	2048x2048
Frame rate	120 fps	250 fps	70 fps	35 fps
Sensor type	1/3" CMOS	1/3" CMOS	2/3" CMOS	1" CMOS
Sensor model	CMV300	CMV300	CMV2000	CMV4000
CPU	Single Core ARM Cortex-A9 800MHz	Dual Core ARM Cortex-A9 800MHz		
System RAM	512 MB			
Flash Memory	Secure Digital 8 GB (up to 32 GB)			
FPGA	Xilinx Artix-7 28K LEs			
Lighting direct channel	2			
Strobe output	2			
Digital inputs	2			
Digital outputs	2 PNP			
LAN	Gigabit Ethernet			
Serial port	RS232-RS485			
Internal Protection	IP67			
Lens	C-mount			
Operating system	Linux			
Power supply	24 VDC			
Power consumption	4.5 W			

Part Numbers

F01623	S50 Smart Camera 640X480 Mono
F01624	S50 Smart Camera 640X480 Color
F01616	S100 Smart Camera 640X480 Mono
F01617	S110 Smart Camera 640X480 Color

F01618	S120 Smart Camera 2048X1088 Mono
F01619	S120 Smart Camera 2048X1088 Color
F01620	S130 Smart Camera 2048X2048 Mono
F01621	S130 Smart Camera 2048X2048 Color

