

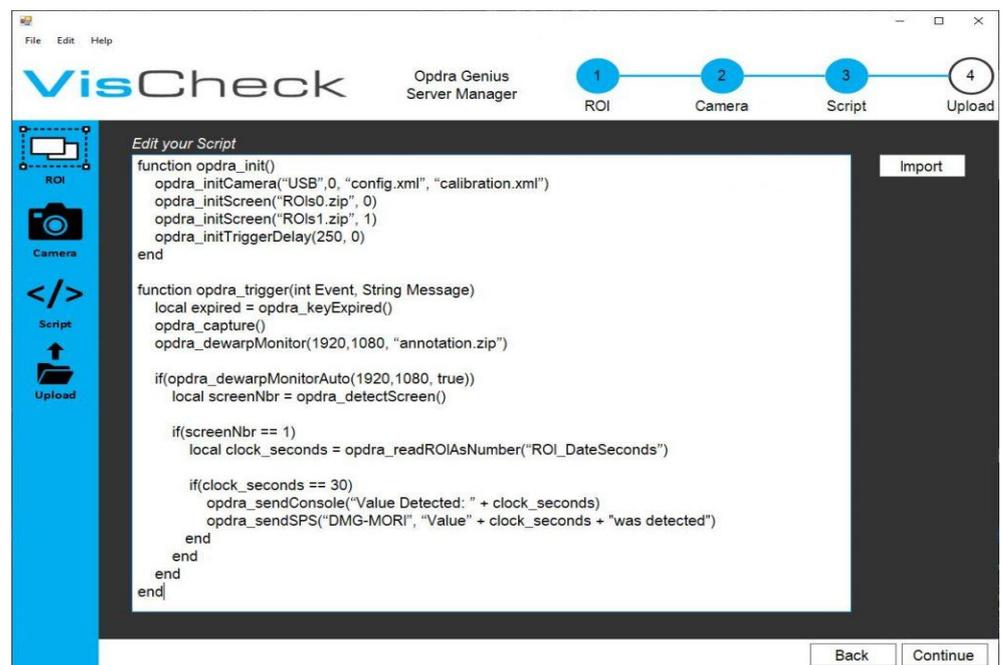
## Opdra -Two Pager

The first software that connects robots with machines without an interface. This often makes ermtlas automation possible in the first place.

Opdra either looks at a screen like a human with the help of a simple camera or - depending on the operating system - can tap the data.



What can be read?	Numbers and letters can be recognized and digitized without any problems. In the case of rare font types, these can be taught in. Colors and lights (flashing) can be taught in. Diagrams cannot be read. Any number of menus of a screen can be entered. Any screen section is possible.
Test:	For the cautious: After setup, the data can be logged and reconciled.
String:	80-100 FPS
Environment conditions:	Opdra sees rather more than a human. With strong reflections, both are overstrained
What hardware is needed:	Camera (USB) or cable and an IPC. Joint use with robot is testable.
Setup:	By means of an input mask, the relevant can be configured. The screen areas to be captured can be determined. Scripts can be uploaded (e.g. if value > 10 i.O. etc.) Everything is stored and calculated locally - no cloud. The operation of the software is usually possible by an expert integrator. The VisCheck team can also intervene. Once the software is set up, there is nothing more to be done subsequently.



Compatibility: Practically every robot is supported. Software-Interface: OPC-UA, TCP, ROS, Modbus, SPS individuell

Possible use cases: Basically, all where a person looks at a screen or a lamp, etc. today. The rule is: the fewer different activities he performs, the easier it is to implement.

Successful conversions: Measuring machine: Robot places tool in measuring machine and controls it until the relevant measuring point is reached. Then the screen of the measuring machine is read and according to the measured values the tools are distinguished as i.O. or n.i.O.

Press brake/ bending machine: Here, additional inputs are made on the machine (photo below)

Machine without screen, with operating lights: Depending on the state of the lights is interacted.

We see use cases in industry/manufacturing, in the laboratory and (later) in the home (e.g., Opdra checks to see if the person with Alzheimer's has turned off the stove).

Possibility of keyboard input: Cobots as well as special small robots (photo) can operate the keyboard/touch screen of a machine like a human being. For this, the knowledge of the machine operator must be transferred into algorithms. With Opdra the input can be controlled and above all typing errors can be recognized.



List Price: 7.500 € (with older machines software interfaces are not possible at all, with new ones they quickly cost 20,000 € and are very complex - risk of loss with updates)

VisCheck GmbH  
 Josef-Kyrein-Str. 4  
 D-85579 Neubiberg/ München  
 ++49/ 170 834 0816  
<https://www.opdra.de> (includes Videos)  
[guido.bruch@vischeck.de](mailto:guido.bruch@vischeck.de)