A plug & play 3D camera for your robot
Automate any pick and place task

Manufacturers worldwide are doing their best to keep up with high standards and strong competition. Production needs to be bigger and better while labor shortage is rising. The solution to their struggles?

The automation of manufacturing processes with robots.

These processes involve the picking and placing of different kinds of parts at the beginning and end of the production line. This takes 40% of the labor force’s working time. However, these tasks were traditionally hard and often impossible to automate.

Pickit makes this possible by making the robot smarter. The 3D camera and software give the robot eyes so it can see the objects in order to pick them.

“Bin picking is one of the biggest challenges in today’s manufacturing and now I can say it’s possible with Pickit.”

— Yann Danesin, Continental, France

“Pickit adds an extra tool in our tool box. We can automate processes that we were not able to automate before.”

— Tom Sheehe, NEFF, USA
Increase the efficiency of your process

This is how it’s done
1. Show an example object to the 3D camera
2. Tell Pickit where to look with our click and drag tool
3. Pickit will tell your robot where the best pickable object is

Pickit will show your robot where to pick parts and place them onto:
- a CNC Machine
- an assembly line
- a conveyor belt
- a welding station
- a working bench
- a tray
- a box
- a package
- a co-workers hand
- and much more...

Our artificial intelligence makes your robot smart
Our product:
- learns what your parts and tool look like,
- knows where your robot and bin are,
- predicts & prevents collisions with obstacles and other parts,
- decides the best part to pick next,
- and much more ...

Now tell us about your application!
And we’ll show you how we automate it: pickit3d.com/go

“We used to finish 400 broomsticks with 6 people. Now we finish 1000 broomsticks with 3 people.”
— Roelof Talen, Talen Tools, The Netherlands
has been convinced since 2017

Set-up
- Bin picking application

Problem
- Labor shortage

Solution
- Universal Robots
- Pickit vision system

Result
- The operator manages two lines instead of one and has more time for value-adding tasks
- The risk of human error was eliminated
“Pickit was able to achieve our goal a lot easier than other solutions.”

- Jerry Reamer, Director Production Engineering at KYB
5 easy ways to benefit from Pickit

Automate with full flexibility
The Pickit software is designed to handle fast adaptations and many different products.

“This machine can handle any part. All you have to do is feed parts under the camera, and there’s your set-up.”
— Adam Wiltsie, Vanamatic, USA

Save installation and setup time
No need for vision experience or a single line of code.

“It’s an elegant solution that fit directly into our current production cell with very little modifications. It was very easy to install.”
— Mike Waddell, KYB, USA

Get rid of bulky and space-taking fixtures
Keep things simple and your factory footprint low with this elegant solution.

Worry less with 24/7 reliability
Pickit delivers quality of work without breaks, vacations or turnover.

Cut costs at a fixed price
Pickit works out of the box, eliminating unexpected integration costs.

“If we have a robot running 24 hours a day 5 days a week, the ROI is probably close to 5 months”
— Doug Sanford, 21st Century Plastics, USA
Pickit supports you on your automation journey

**Proof of concept**
We want to show you we can solve your automation needs. We evaluate your case so you know exactly what Pickit can do for you.

**Online knowledge base**
Pickit’s extensive online knowledge base contains more than 100 articles ranging from basic to advanced. Visit support.pickit3d.com for articles, training materials and webinars.

**Built-in support**
Pickit has a built-in snapshot tool. In a snapshot, the camera images and detection parameters of the last detection are stored. This allows us to give you remote support as if we were there.

**Direct support**
Did you run into an issue? Just contact us or one of our local partners and we’ll help you out.

**Live and remote training**
Do you want to discover all possibilities of our system? Don’t hesitate to request a training session - remote, or in our Belgium, Korea or US office.

“Pickit provides a plethora of information on their support page. You can email them and expect a response within a day.”

— Austin Shupe, ONExia, USA
Find the best solution for your application

**Pickit®**
- Best in class camera
- Picks **small and medium sized objects**
- High accuracy

**Pickit™**
- Highly versatile 3D camera
- Picks **medium sized objects**
- Fastest ROI in the market

**Pickit™**
- Highly versatile 3D camera
- Picks **large sized objects**
- Pallet unloading
Thousands of objects picked with Pickit

Contact us and we’ll demonstrate how we pick your objects.
pickit3d.com/go
Pickit M-HD facts

Minimum object size:
10 x 10 x 5 mm

FIELD OF VIEW (FOV) DIMENSIONS

Field of view (FOV)

SIDE VIEW

FRONT VIEW

271 mm
617 mm
383 mm
691 mm
1000 mm
433 mm
600 x 400 x 300
8.5°

FOV
BIN

1330 mm

871 mm

FOV
BIN

600 x 400 x 300
**Camera Technical Specifications**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D Measurement Method</td>
<td>Structured light</td>
</tr>
<tr>
<td>Image Processing Speed</td>
<td>10 Hz (100 ms snapshots)</td>
</tr>
<tr>
<td>3D Camera Accuracy</td>
<td>0.1 mm</td>
</tr>
<tr>
<td>3D Camera Repeatability</td>
<td>&lt; 1 mm</td>
</tr>
<tr>
<td>3D Camera Weight</td>
<td>2 kg</td>
</tr>
<tr>
<td>3D Camera Connection to PC</td>
<td>M12-8 (USB) - USB3</td>
</tr>
<tr>
<td>PC Connection to Robot</td>
<td>TCP/IP over Ethernet</td>
</tr>
<tr>
<td>Power Supply</td>
<td>M12-5 24VDC</td>
</tr>
<tr>
<td>Temperature</td>
<td>10°C to 40°C</td>
</tr>
<tr>
<td>IP Rating</td>
<td>IP65</td>
</tr>
<tr>
<td>Vibrations</td>
<td>5G Sinus, 25G Shock</td>
</tr>
<tr>
<td>Conforms to</td>
<td>CE, CB, EN6950, FCC class A</td>
</tr>
</tbody>
</table>

**Camera Cable Technical Specifications**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>10m</td>
<td>Industrial M12 camera connector</td>
</tr>
<tr>
<td>High-Flex / Continuous-Flex</td>
<td>Type-U (R= 67.5 mm - 5,000,000 times)</td>
</tr>
<tr>
<td></td>
<td>Type-S (R= 60 mm - 1,000,000 times)</td>
</tr>
<tr>
<td></td>
<td>90° Tick-Tock bending (R= 60 mm - 1,000,000 times)</td>
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</tbody>
</table>

**Processor**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Consumption</td>
<td>While turned off: 25W</td>
</tr>
<tr>
<td></td>
<td>Booting: 115W</td>
</tr>
<tr>
<td></td>
<td>Idle: 70W</td>
</tr>
<tr>
<td></td>
<td>Heavy processing: 160W</td>
</tr>
<tr>
<td>Technical Specifications</td>
<td>Processor: 6 cores (12 threads) at 3.7 Ghz</td>
</tr>
<tr>
<td></td>
<td>19 inch server: rack compatible (2U)</td>
</tr>
<tr>
<td></td>
<td>Temperature: -20°C to 70°C</td>
</tr>
<tr>
<td></td>
<td>Vibrations: Operating, 5 Grms, 5-500 Hz, 3 axes</td>
</tr>
<tr>
<td></td>
<td>IP rating: IP54</td>
</tr>
<tr>
<td></td>
<td>Power supply: 9–32V DC 160W</td>
</tr>
<tr>
<td></td>
<td>Humidity: ~95% @ 40°C (non-condensing)</td>
</tr>
<tr>
<td></td>
<td>Weight: 11 kg</td>
</tr>
</tbody>
</table>

**Use Pickit with the Robot of Your Choice**

- Fanuc
- Stäubli
- Kuka
- Yaskawa
- ABB
- Universal Robots
- Franka Emika
- AUBO Robotics
- Hanwha
- Hyundai Robotics
- Nachi
- Omron
- TM
Pickit M facts

Minimum object size: 50 x 50 x 10 mm

FIELD OF VIEW (FOV) DIMENSIONS

L-bracket mounts to profiles

Ball joint pivot (P)

Profile distance

Profile front distance

3D camera front

Minimum object size: 50 x 50 x 10 mm

Field of view (FOV)

SIDE VIEW

FRONT VIEW

FOV

BIN 600 x 400 x 300

700 mm

425 mm

450 mm

350 mm

400 mm

900 mm
**CAMERA TECHNICAL SPECIFICATIONS**

- **3D measurement method**: Structured light
- **Image processing speed**: 30 fps
- **3D Camera accuracy**: < 3mm
- **3D Camera repeatability**: < 1mm
- **3D camera weight**: 1030 g
- **3D camera connection to PC**: M12 (USB) - USB3
- **PC connection to robot**: TCP/IP over Ethernet
- **Power supply**: USB3 5VDC
- **Temperature**: 5°C to 40°C
- **Humidity**: -95% @ 40°C (non-condensing)
- **IP rating**: IP55
- **Vibrations**: Operating, 2 Grms, 5-500 Hz, 3 axes
- **Conforms to**: CE, FCC

**CAMERA CABLE TECHNICAL SPECIFICATIONS**

- **10m**
  - Industrial M12 camera connector
  - High-Flex / Continuous-Flex
    - Type-U (R= 67.5mm - 5.000.000 times)
    - Type-S (R= 60mm - 1.000.000 times)
    - 90° Tick-Tock bending (R= 60mm - 1.000.000 times)

**PROCESSOR**

- **Power consumption**
  - While turned off: 25W
  - Booting: 100W
  - Idle: 60W
  - Heavy processing: 130W
- **Technical specifications**
  - Processor: 6 cores (12 threads) at 3.7 Ghz
  - 19 inch server: rack compatible (2U)
  - Temperature: -20°C to 70°C
  - Vibrations: Operating, 5 Grms, 5-500 Hz, 3 axes
  - IP rating: IP54
  - Power supply: 9-32V DC 160W
  - Humidity: -95% @ 40°C (non-condensing)
  - Weight: 11 kg

**USE PICKIT WITH THE ROBOT OF YOUR CHOICE**

- FANUC
- KUKA
- ABB
- YASKAWA
- STÄUBLI
- UNIVERSEL ROBOTS
- Hanwha
- NACHI
- Omron
- TM
Pickit L
facts

Minimum object size:
150 x 150 x 50 mm

FIELD OF VIEW (FOV)
DIMENSIONS

Field of view (FOV)

SIDE VIEW
FRONT VIEW

1000 mm
1150 mm
750 mm
250 mm

800 x 1200 x 144 pallet
800 x 1200 x 144 pallet

1500 mm
1900 mm
CAMERA TECHNICAL SPECIFICATIONS

- **3D measurement method**: Structured light
- **Image processing speed**: 30 fps
- **3D Camera accuracy**: < 12mm
- **3D Camera repeatability**: < 4mm
- **3D camera weight**: 1030 g
- **3D camera connection to PC**: M12 (USB) – USB3
- **PC connection to robot**: TCP/IP over Ethernet
- **Power supply**: USB3 5VDC
- **Temperature**: 5°C to 40°C
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USE PICKIT WITH THE ROBOT OF YOUR CHOICE

- FANUC
- STÄUBLI
- KUKA
- YASKAWA
- ABB
- UNIVERSAL ROBOTS
- FRANKA EMKA
- AUBO
- Hanwha
- HYUNDAI
- NACHI
- Omron
- TM
Find us **all** over the world

Pickit has a global network with excellent partners. These trained Pickit experts distribute Pickit and provide first class local support.

**Get in touch**

We’ll help you save time, lower costs and ensure a reliable output with a product that ensures the fastest ROI on the market.

Do you want to benefit from Pickit? **Contact us or one of our partners today.**

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