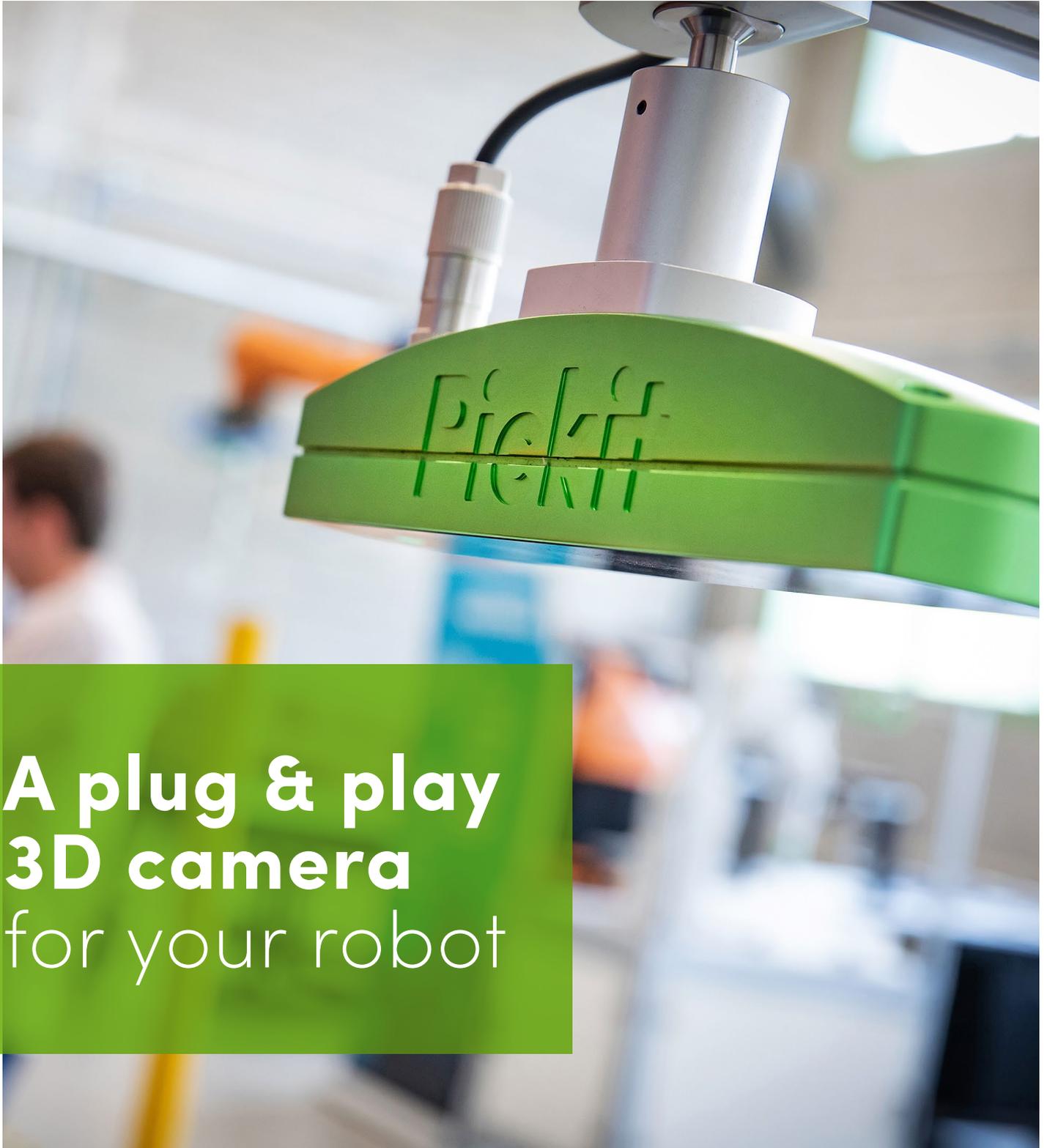


Pickit

robot vision made easy



**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.

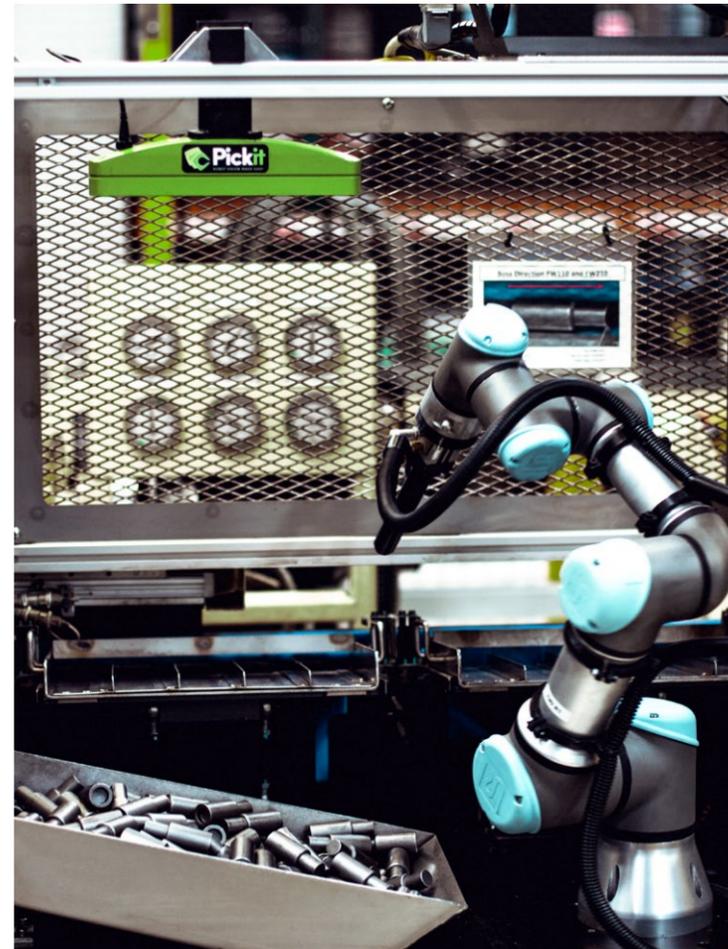
Pickit makes this possible by making the robot smarter. The 3D camera and software **give the robot eyes** so it can see the objects in order to pick them.

“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



UR+ CERTIFIED

Setting up and running an application with Pickit on your Universal Robots robot is nearly effortless with the free Pickit URcap.

support.pickit3d.com/urcap



Increase the efficiency of your process

“We used to finish 400 broomsticks with 6 people. Now we finish 1000 broomsticks with 3 people.”

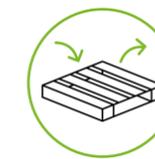
— Roelof Talen, Talen Tools, The Netherlands



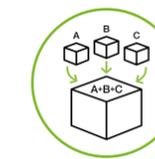
bin picking



machine tending



pallet unloading



kitting and assembly

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 ...



USE PICKIT WITH THE ROBOT OF YOUR CHOICE



Now tell us about your application!

And we'll show you how we automate it: pickit3d.com/contact

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, Vanomatic, 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 right camera for your application



Pickit L

- High versatility
- **Medium and large** parts or surfaces
- Objects size from 50x50x10 mm
- Best price-performance



Pickit M-HD

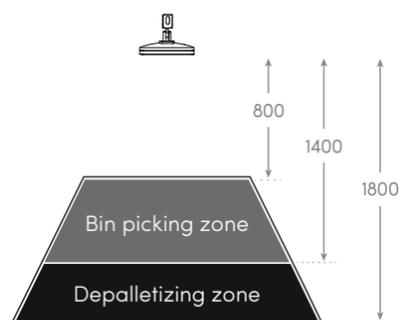
- High accuracy
- **Small and medium** parts or surfaces
- Objects size from 10x10x5 mm
- Top performance



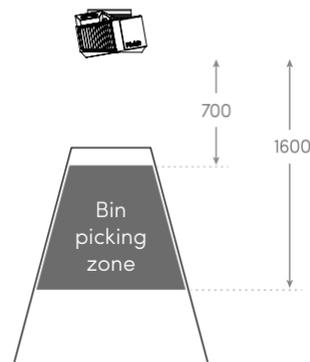
Pickit L-HD

- High accuracy and large FOV
- **Large** parts or surfaces, big bins and pallets
- Objects size from 50x50x10 mm
- Top performance

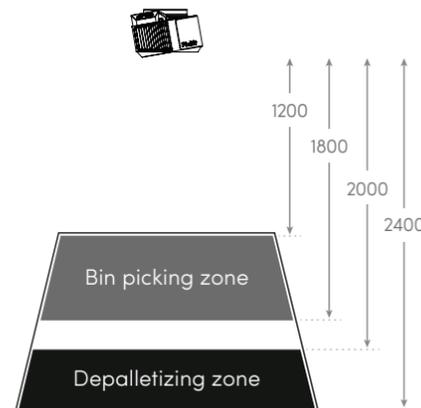
Optimal working distances



Distances from camera in mm.



Distances from camera in mm.



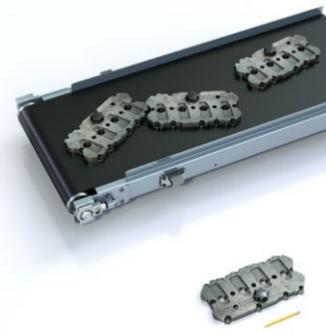
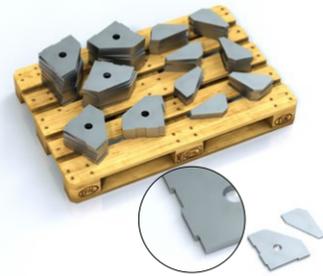
Distances from camera in mm.

Typical applications for 3D picking



Tell us where you plan to pick from, what kind of parts, and get recommendations on the best-fit Pickit products for your application.

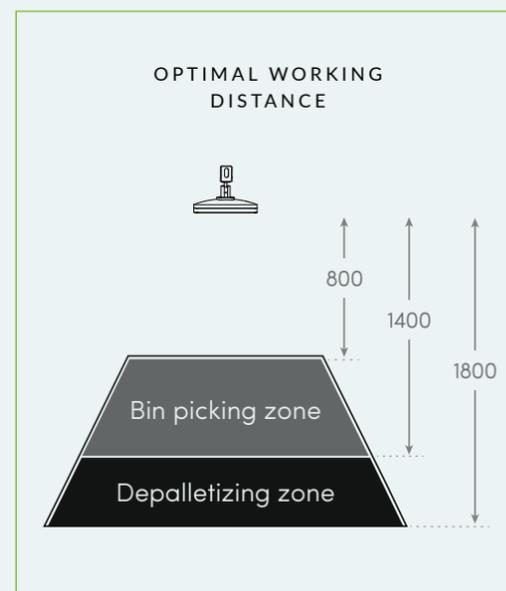
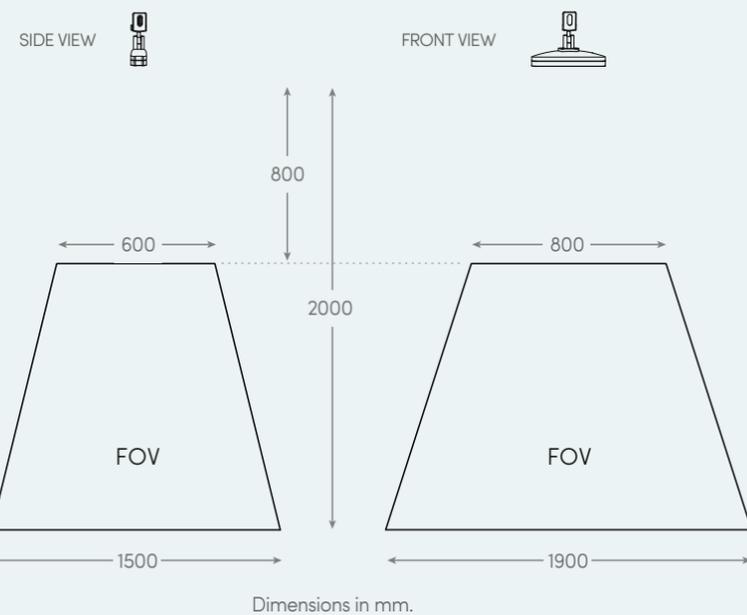
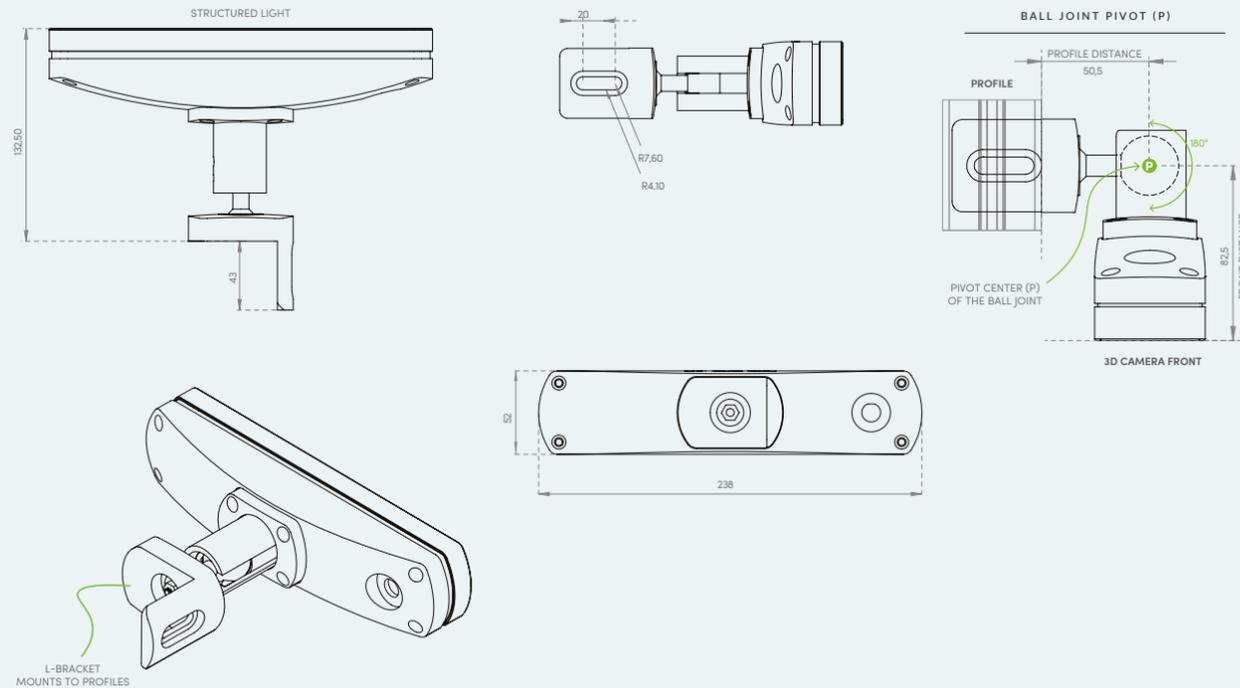
pickit3d.com/contact



Tell us where you plan to pick from, what kind of parts, and get recommendations on the best-fit Pickit products for your application.

pickit3d.com/contact

Pickit L facts



CAMERA TECHNICAL SPECIFICATIONS

3D measurement method	Structured light
3D image capturing time	300 ms
3D camera resolution (pixels)	640x480
3D camera precision (mm)*	1.0- 3.0 mm
3D camera accuracy (%)	< 1.2%
3D camera accuracy (mm)**	4 - 18 mm
Estimated picking accuracy***	1.5 - 2 x 3D camera accuracy
3D camera weight	1030 g
3D camera connection to PC	M12-8 (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	IP 54
Vibrations	Operating, 2 Grms, 5-500 Hz, 3 axes
Conforms to	CE, FCC

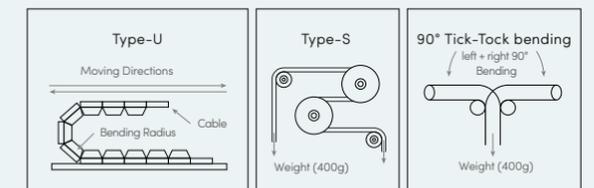
* A larger distance from the camera has lower 3D camera precision
 ** A larger FOV has lower 3D camera accuracy
 ** Average accuracy from the real production environment

CAMERA CABLE TECHNICAL SPECIFICATIONS

10 m / 20 m

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: 3 W
- Booting: 35 W
- Idle: 25 W
- Heavy processing: 85 W

Technical specifications

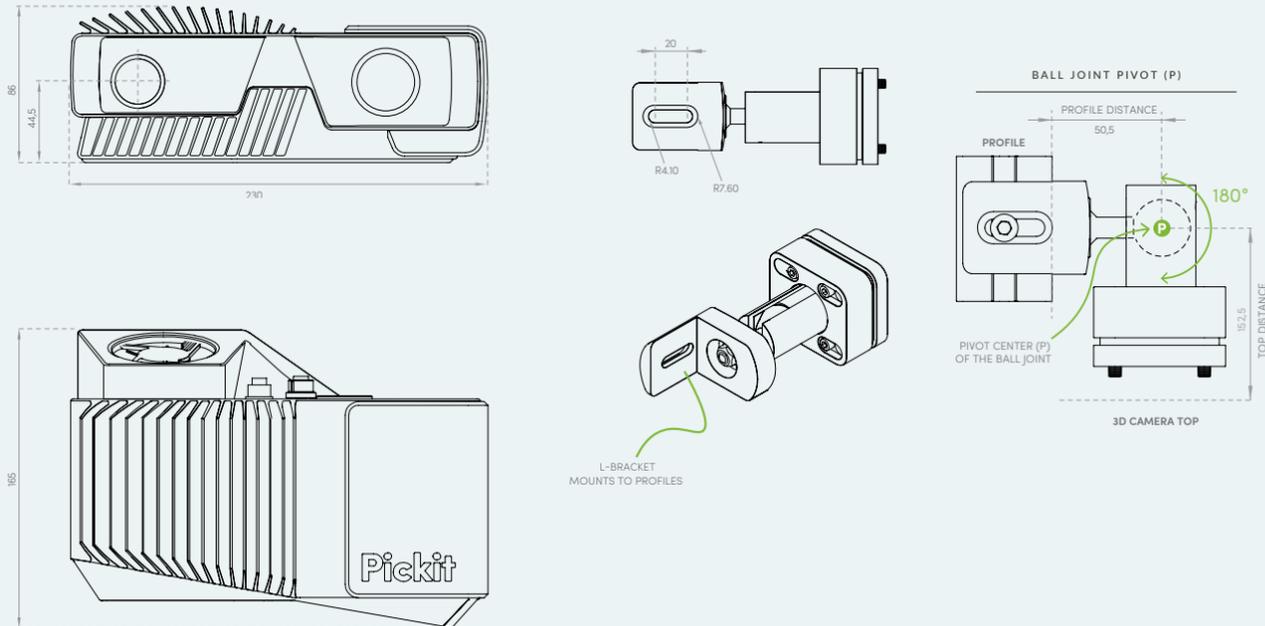
- Processor: 6 cores (12 threads) at 3.7 Ghz
- 19 inch server: rack compatible (1U)
- Temperature: 5°C to 40°C
- Vibrations: 1Grms (HDDx1); 3 Grms (SSD x 1)
- IP rating: IP20
- Humidity: 10-85% @ 40°C
- Weight: 2.5 kg



USE PICKIT WITH THE ROBOT OF YOUR CHOICE



Pickit M-HD facts



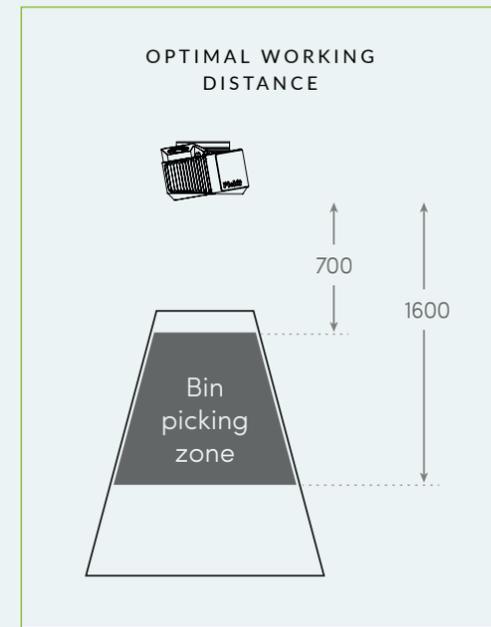
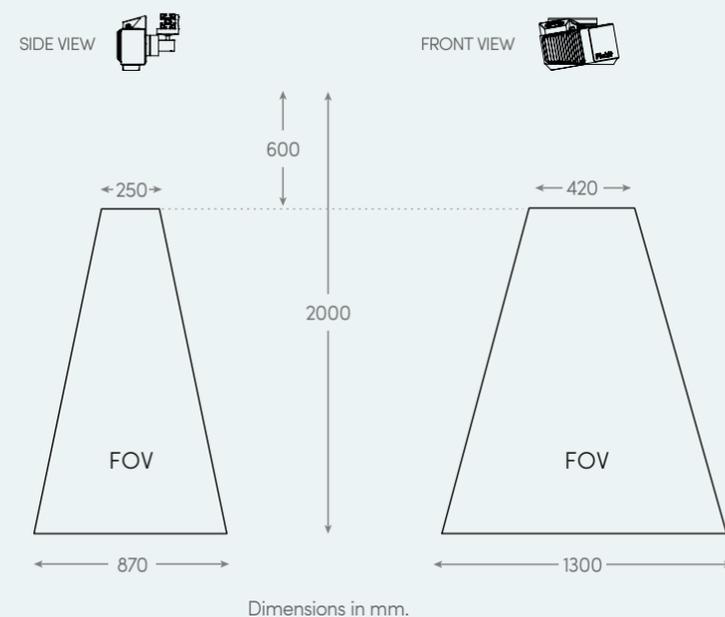
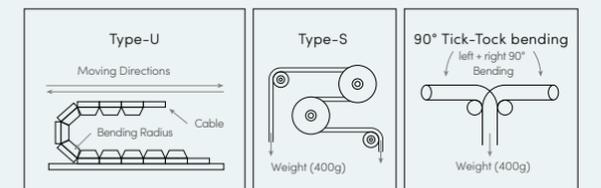
CAMERA TECHNICAL SPECIFICATIONS

3D measurement method	Structured light
3D image capturing time	200-1000 ms
3D camera resolution (pixels)	1920 x 1200
3D camera precision (mm)*	0.15 - 0.8 mm
3D camera accuracy (%)	< 0.75%
3D camera accuracy (mm)**	2 - 4 mm
Estimated picking accuracy***	1.5 x 3D camera accuracy
3D camera weight	2 kg
3D camera connection to PC	M12-8 (USB) - USB3
PC connection to robot	TCP/IP over Ethernet
Power supply	M12-5 24 VDC / 120 W
Temperature	10°C to 40°C
IP rating	IP65
Vibrations	5G Sinus, 25G Shock
Conforms to	CE, CB, EN6950, FCC class A

* A larger distance from the camera has lower 3D camera precision
 ** A larger FOV has lower 3D camera accuracy
 *** Average accuracy from the real production environment

CAMERA CABLE TECHNICAL SPECIFICATIONS

- 10 m / 25 m / 50 m**
- 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: 3 W
 - Booting: 35 W
 - Idle: 25 W
 - Heavy processing: 85 W

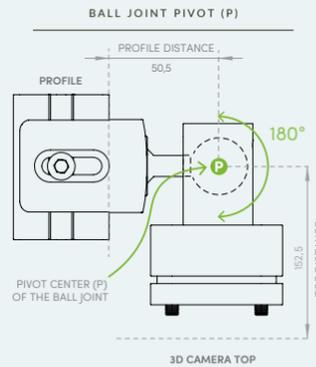
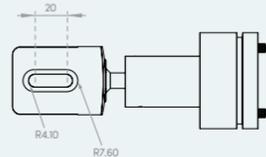
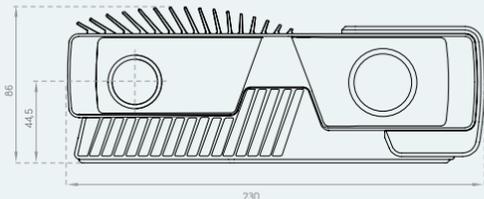
- Technical specifications**
- Processor: 6 cores (12 threads) at 3.7 Ghz
 - 19 inch server: rack compatible (1U)
 - Temperature: 5°C to 40°C
 - Vibrations: 1Grms (HDDx1); 3 Grms (SSD x 1)
 - IP rating: IP20
 - Humidity: 10-85% @ 40°C
 - Weight: 2.5 kg



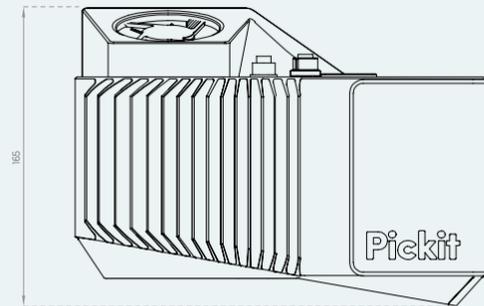
USE PICKIT WITH THE ROBOT OF YOUR CHOICE



Pickit L-HD facts

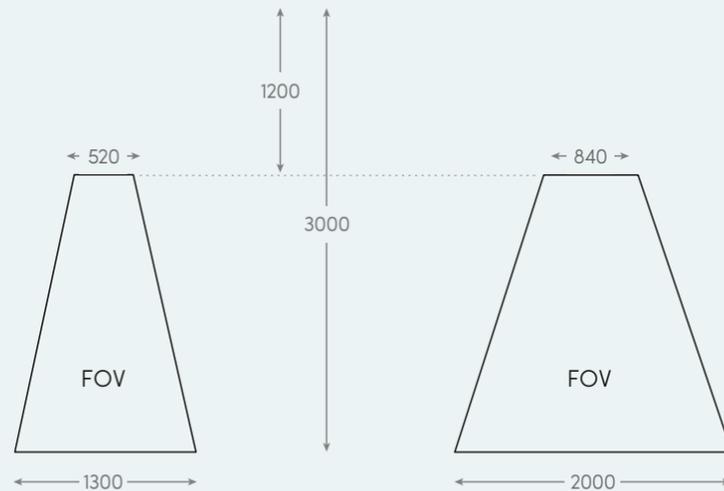


L-BRACKET MOUNTS TO PROFILES

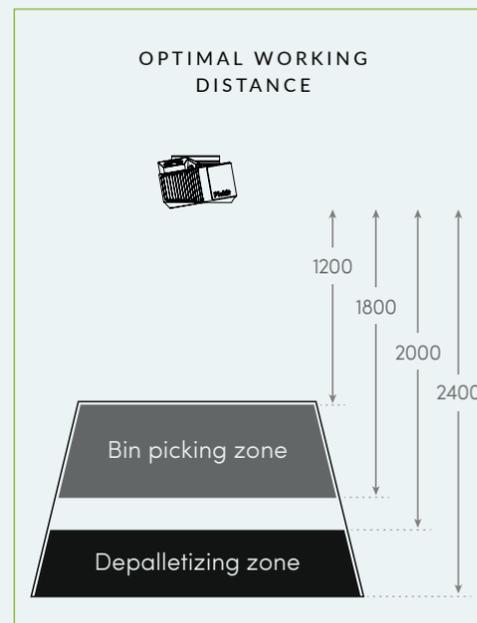


SIDE VIEW

FRONT VIEW



Dimensions in mm.



CAMERA TECHNICAL SPECIFICATIONS

3D measurement method	Structured light
3D image capturing time	200-1000 ms
3D camera resolution (pixels)	1920 x 1200
3D camera precision (mm)*	0.3 - 1.6 mm
3D camera accuracy (%)	< 0.75%
3D camera accuracy (mm)**	3 - 7 mm
Estimated picking accuracy***	1.5 x 3D camera accuracy
3D camera weight	2 kg
3D camera connection to PC	M12-8 (USB) - USB3
PC connection to robot	TCP/IP over Ethernet
Power supply	M12-5 24 VDC / 120 W
Temperature	10°C to 40°C
IP rating	IP65
Vibrations	5G Sinus, 25G Shock
Conforms to	CE, CB, EN6950, FCC class A
Conforms to	CE, FCC

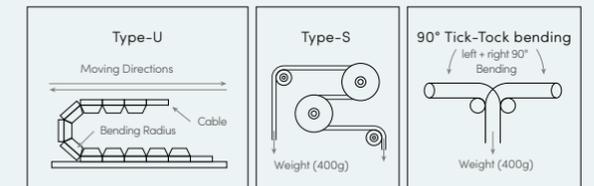
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- IP rating: IP20
- Humidity: 10-85% @ 40°C
- Weight: 2.5 kg



USE PICKIT WITH THE ROBOT OF YOUR CHOICE





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.**

+32 16 624 882
sales@pickit3d.com

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www.pickit3d.com

