A hand holding a smartphone with a light field camera concept overlay. The background is a blurred image of a person's face, overlaid with a blue and orange gradient. A white L-shaped line is in the top-left corner.

A NEW LIGHT FIELD SELFIE CAMERA CONCEPT

CAPTURE NOW & PLAY LATER



WOOPTIX

The logo icon for poLight, featuring a stylized white 'p' shape with a small diamond at the top center.

poLight

INDEX

The Technology	4
poLight	5
Wooptix	6
Features	8
All-in-focus	10
Re-focus	11
Bokeh	12
3D photo	13
Background removal	14
Depth map	15
EVKs & platforms	16

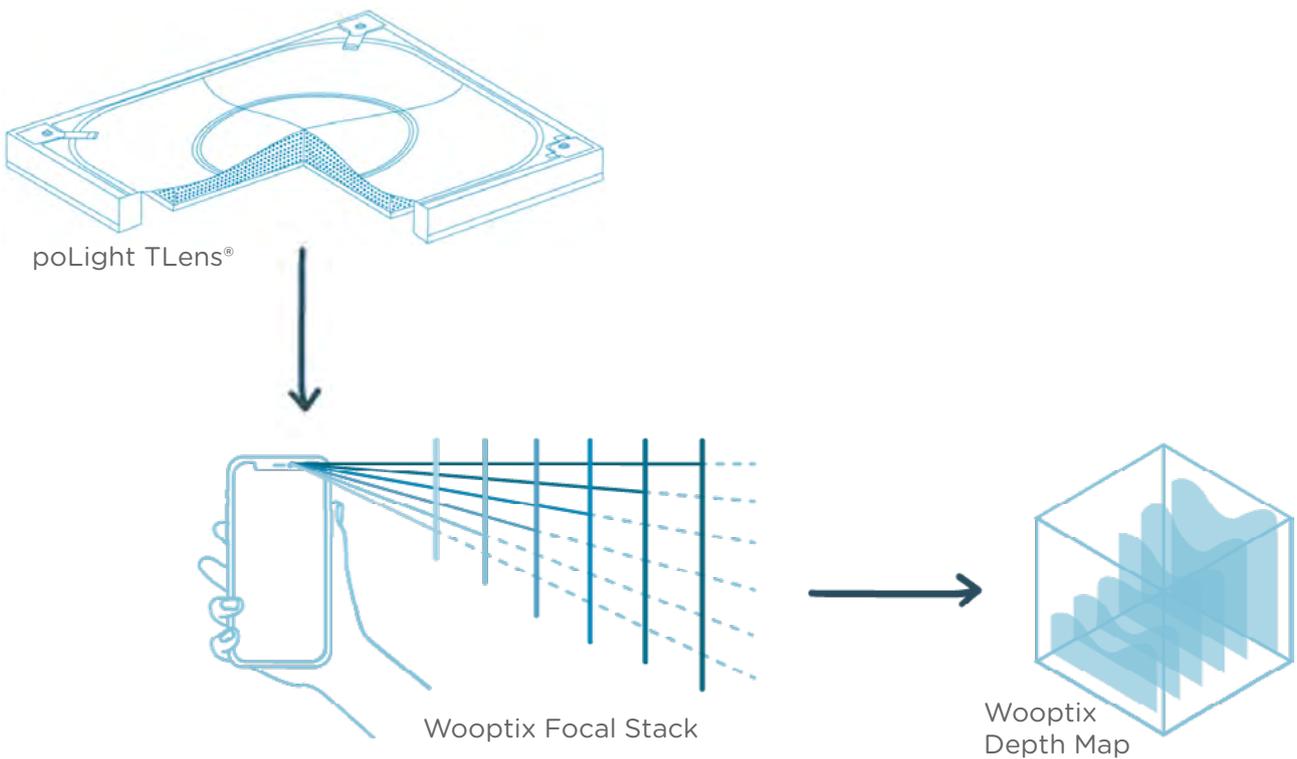
LIGHT FIELD SELFIE CAMERA CONCEPT



THE TECHNOLOGY

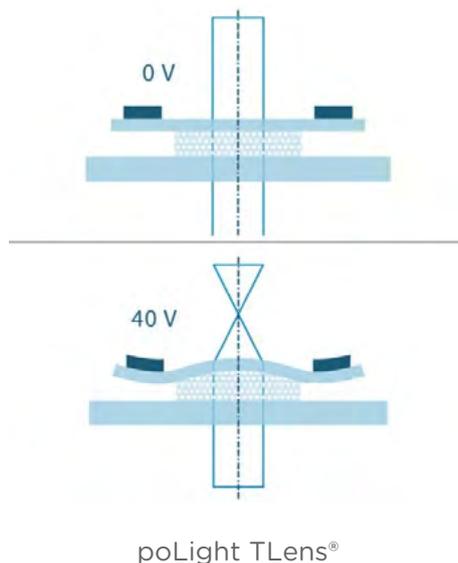
poLight® ultra-fast TLens® technology combined with Wootpix® light field image processing enables a major differentiation in capabilities of front-facing-camera systems suitable for portable devices.

The ultra-fast speed, super low power, and stable field of view of poLight TLens® hardware provide the foundation for Wootpix® unique light field image processing algorithms. The combination provides a wide range of possibilities to acquire and render 2D, 3D and light field imaging.

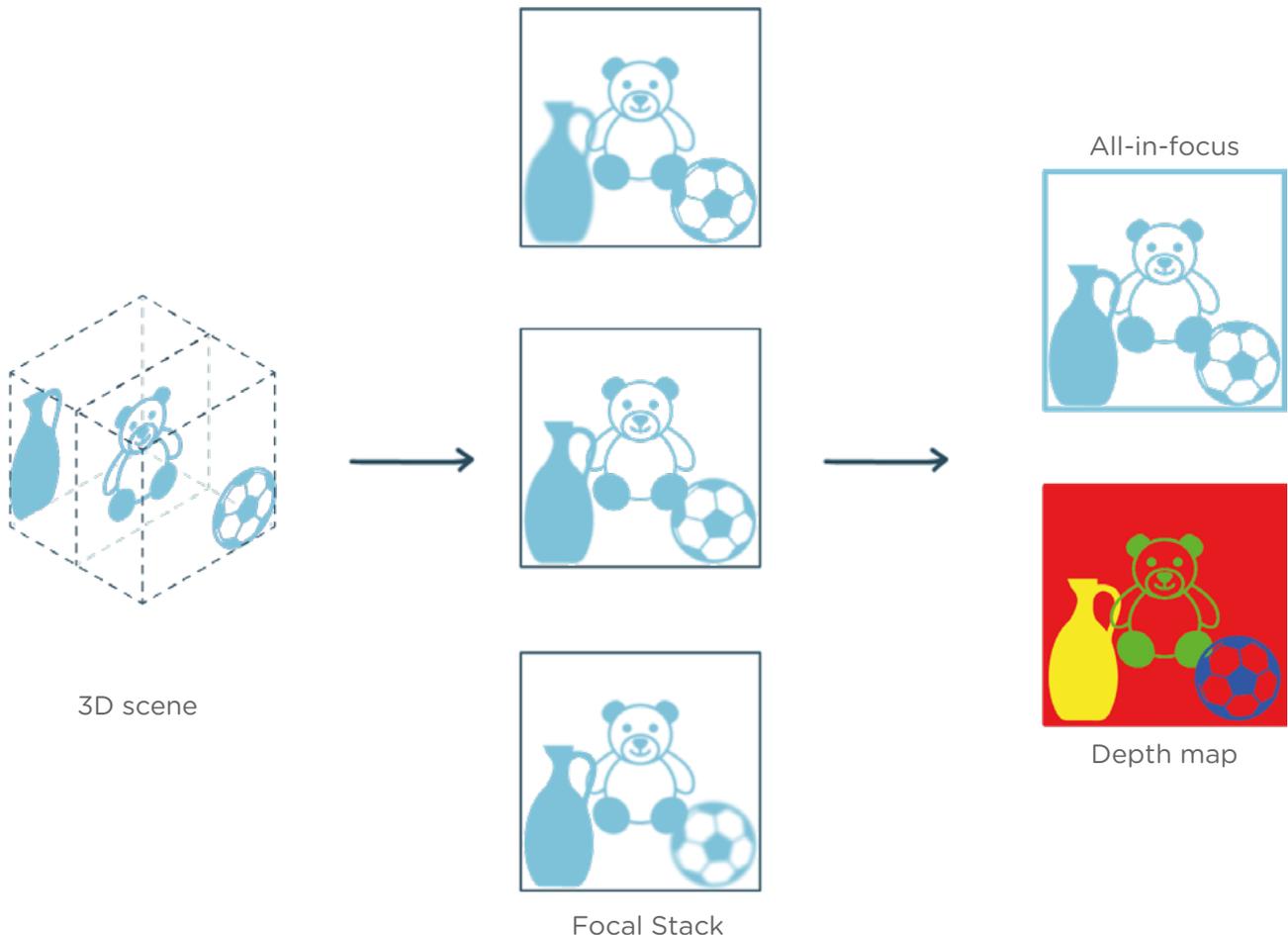




poLight® has been developing a solid-state tuneable lens technology that can replace mechanical VCM solutions and liquid lens solutions. The innovation uses a piezo-electric actuator, thin glass membrane and a flexible polymer to change the focal length of the camera lens. poLight's product, called TLens®, is essentially an auto-focus technology that does not require any movement of lenses. Instead, it works by changing the optical power of the lens system. The characteristic of this products enables very fast focal-plane image acquisition – exactly the data needed for the Woptix light field image processing algorithms.



Wooptix has developed patented proprietary Light Field technology that reconstructs the light field data from a multitude of images captured at different focal planes. One of the unique features of Wooptix's technology is how to optimize the enormous amount of information coming from light field image or video acquisition and process it in live fully in software. Wooptix has already demonstrated live Full HD Light Field video acquisition and processing software on consumer-grade silicon platforms. Wooptix's Full HD video experience brings all benefits of Light Field to the user - refocus at will, change depth of field, select point of view among others, all in software.





FEATURES

Standard selfie shot user interface using Wootpix light field technology introduces new capabilities for picture editing and sharing.



ALL IN FOCUS

Every pixel in focus



RE-FOCUS

Choose which planes to keep focus or out of focus



3D PHOTO

Generate multiple viewpoints of the scene



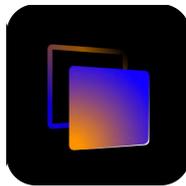
DEPTH MAP

Get a distance map generated from the focal stack



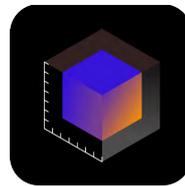
BOKEH

Activate portrait mode to blur the background



BACKGROUND REMOVAL

Select and remove the background without chroma



DISTANCE MEASUREMENT

Get an approximate distance between objects using the depth map



LIGHT FIELD FILE EXPORT

Export files ready to enjoy on a light field or holographic display

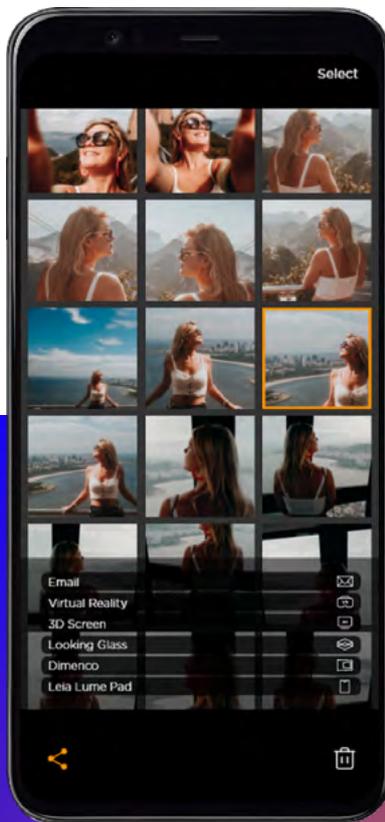
1

CAPTURE NOW



2

GO TO GALLERY



3

PLAY LATER



CAPTURE NOW

1

GO TO GALLERY

2

PLAY LATER

3

ALL-IN-FOCUS



EVERY PIXEL IN-FOCUS

RE-FOCUS



DIFFERENT FOCUS SELECTION

BOKEH

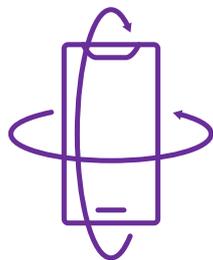


BOKEH DONE AFTER THE PICTERE HAS BEEN TAKEN

3D PHOTO



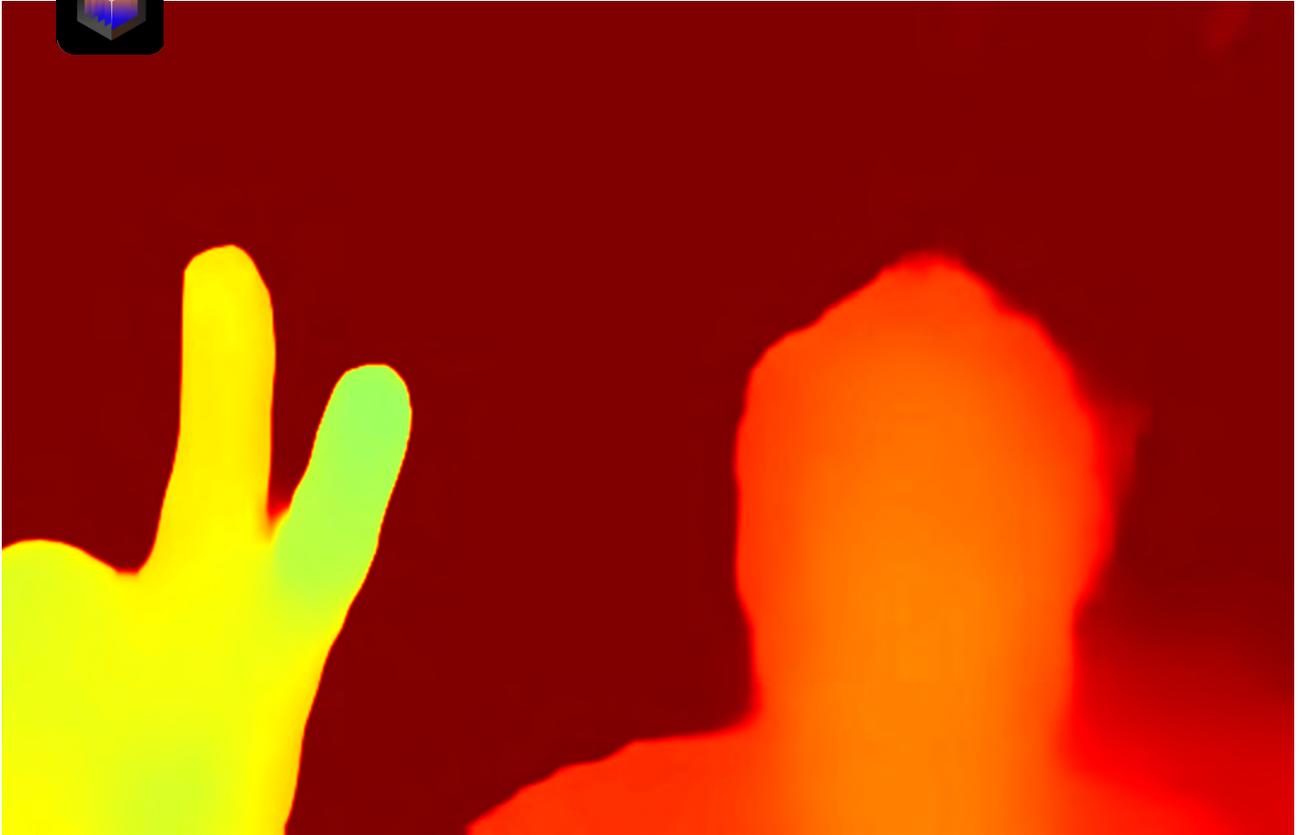
3D EFFECT CONNECTED TO THE ACCELEROMETER
OF THE MOBILE DEVICE



BACKGROUND REMOVAL



DEPTH MAP



HIGH QUALITY DEPTH MAP, THE PERFECT MATCH FOR AR APPS AND SOCIAL MEDIA. VERY EASY TO EDIT THE PICTURE PROFESSIONALLY AND TO INSERT DIGITAL OBJECTS OR VISUAL EFFECTS INTO THE IMAGE

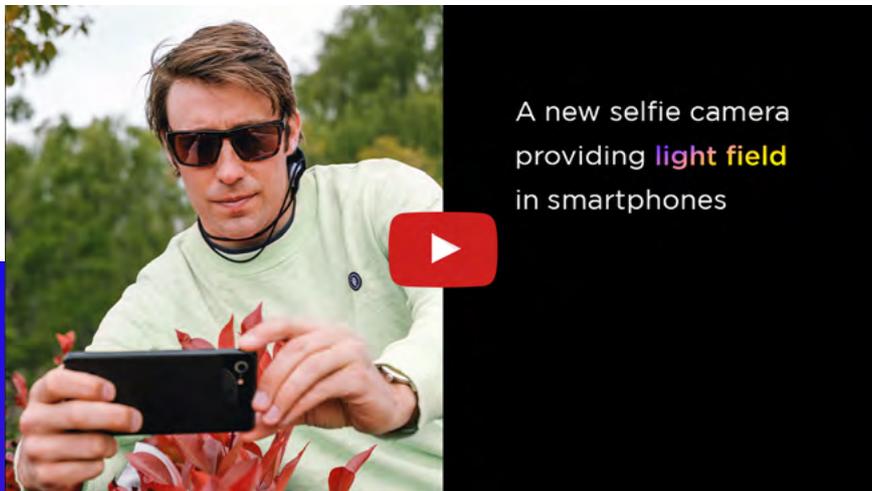
EVKS & PLATFORMS



Object code executables are available to run on any TLens® equipped Android phone to demonstrate the capabilities of Woptix light field imaging



Full custom implementations can be developed, fully optimized for customer platform and integrated into native applications



CLICK ON THE VIDEO FOR MORE CONTENT



Wooptix is a developer of light field & wavefront phase imaging platform designed to acquire all information about the light, using a single lens utilizing the full sensor resolution. The company's technique enables everyone to achieve their vision with more data points at high frame rate and volumetric images & video.

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www.wooptix.com



After more than a decade of research and development aimed at replicating the lens of the human eye, poLight is now ready to introduce to the market a technology that captures astonishing images with instant focus.

info@polight.com
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