A NEW **LIGHT FIELD SELFIE**
CAMERA CONCEPT
CAPTURE NOW & PLAY LATER
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CAPTURE NOW PLAY LATER
LIGHT FIELD SELFIE CAMERA CONCEPT
**THE TECHNOLOGY**

poLight® ultra-fast TLens® technology combined with Wooptix® 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 Wooptix® 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 product enables very fast focal-plane image acquisition – exactly the data needed for the Wooptix 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 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 Wooptix 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
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
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 Wooptix 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.

info@wooptix.com
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
www.polight.com