Perfecting Smartphone Photos

The back of your mobile phone may soon be covered with tiny lenses that take simultaneous images that are computationally stitched together for new effects and capabilities.

**Single lens**

**GOOGLE PIXEL 3**
- Released October 2018
- 12.2-megapixel, dual-pixel lens

**Dual lens**

**iPHONE Xs**
- Released September 2018
- 12-megapixel wide-angle lens
- 12-megapixel telephoto lens with 2x optical zoom

**Triple lens**

**HUAWEI P20 PRO**
- Released March 2018
- 40-megapixel main RGB lens
- 20-megapixel monochromatic lens (to help with depth and lowlight situations)
- 8-megapixel telephoto lens with 3x zoom

**Quad lens**

**SAMSUNG GALAXY A9**
- Released October 2018
- 24-megapixel main lens
- 8-megapixel, 120° ultrawide lens
- 5-megapixel depth lens
- 2x optical zoom telephoto lens

**Penta lens**

**NOKIA 9 PUREVIEW**
- Available February 2019
- A promotional video purportedly showing the Pureview, leaked at year-end 2018, featured a device with five Zeiss lenses, a depth sensor and a dual-LED dual-tone flash

**Nine lenses?**

Available date unknown
In mid-2018, the Washington Post reported that the startup company Light was developing a smartphone with up to nine lenses, capable of capturing 44-megapixel shots with superior low-light performance and depth effects

**THE FUTURE OF SMARTPHONE CAMERAS.** Multiple lenses, powerful algorithms and AI software work together to instantly recognize different scenes and situations for maximum photo quality.

**+ BETTER LOW-LIGHT AND NIGHTTIME IMAGES**
Multiple lenses shooting at the same time allow additional light to enter, and software analyzes the scene based on information from the lenses

**+ PROFESSIONAL-QUALITY PORTRAITS**
Secondary monochrome lenses work with software to create depth maps that keep the subject perfectly in focus against a blurred background

**+ MORE POWERFUL ZOOM**
Multiple lenses or pixel-recognizing software shoot a burst of photos at once and merge them together to deliver better levels of detail

Source: apple.com, store.google.com, consumer.huawei.com, samsung.com / Infographic by Alessia Kirkland