



With a few [notable exceptions](#), most smartphone cameras zoom either digitally or via a few optical zoom presets. That could soon change, however, as LG Innotek has announced its new Optical Telephoto Zoom Camera Module.

When you use the digital zoom on a smartphone – or even on a cheaper point-and-shoot camera – all you're really doing is magnifying the pixels in the middle of the image. As a result, the more you zoom, the grainier the shot gets.

Some smartphones do utilize individual optical telephoto modules, each one of which is set to a different focal length. While these allow for sharper images than digital zooms, users have to choose between the offered focal lengths instead of zooming continuously from one to the other. Additionally, those multiple modules take up space in the phone that could otherwise be dedicated to things like a larger battery.

Integrated into the rear side of the phone, LG's Optical Telephoto Zoom Camera Module is designed to address those limitations by allowing users to continuously optically zoom through the 4- to 9-times magnification range. It does so proper-zoom-lens-style, by physically moving the lens in micrometer increments (a micrometer is one one-thousandth of a millimeter).

The module additionally features an Optical Image Stabilizer to minimize blur in photos taken at longer focal lengths. Optical image stabilization allows for sharper images than digital image stabilization, the latter of which compensates for camera movements by (slightly) digitally

zooming in on images.

As an added benefit, the new module is claimed to be flat enough that it won't add a "camera bump" to phones incorporating it.

LG Innotek is currently working with Qualcomm Technologies to develop software for the Optical Telephoto Zoom Camera Module, which will include features such as autofocus, auto-exposure, auto white balance and lens shading correction. There's currently no word on when the technology may start appearing in commercially available smartphones.

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* __ Source: [LG Innotek](#)