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## Visual Physics: Wow! That Was Taken With A Cellphone?

By: David Sitar and Mariah Birchard

## **Abstract**

This raw image of the Sun was taken with a Nokia Lumia 521 cellphone camera held to the back end of a 20-mm eyepiece inserted into a Coronado SolarMax II double stacked 60-mm Hydrogen-Alpha solar telescope. With cellphone camera technology advancing so quickly, solar photography is becoming more accessible to amateurs without the hefty costs of high- or low-end CCD cameras. In fact, decent results can be obtained for even some bright nighttime objects imaged through telescopes with nothing more than a cellphone camera. Therefore, if you have a solar telescope or any type of telescope and a cellphone, try taking an image and see what you get. This is also great for those science teachers out there who have telescopes; you can now send your students away after an observing session with some immediate nicely detailed images. The Sun, Moon, bright planets and stars, and, believe it or not, M42 (the Orion Nebula) are all great candidates.

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## **Visual Physics**

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## Wow! That was taken with a cellphone?

This raw image of the Sun was taken with a Nokia Lumia 521 cellphone camera held to the back end of a 20-mm eyepiece inserted into a Coronado SolarMax II double stacked 60-mm Hydrogen-Alpha solar telescope. With cellphone camera technology advancing so quickly, solar photography is becoming more accessible to amateurs without the hefty costs of high- or low-end CCD cameras. In fact, decent results can be obtained for even some bright nighttime objects imaged through telescopes with nothing more than a cellphone camera. Therefore, if you have a solar telescope or any type of telescope and a cellphone, try taking an image and see what you get. This is also great for those science teachers out there who have telescopes; you can now send your students away after an observing session with some immediate nicely detailed images. The Sun, Moon, bright planets and stars, and, believe it or not, M42 (the Orion Nebula) are all great candidates.

Remember to never stare at the Sun and don't image the Sun with your cameras through a telescope without proper filters. Permanent damage to your eyes and cameras will occur.