



Product Type: Ultraviolet Camera

Product Name: PiCam Permanent (with spectrometer)

Design Number: UV003a

Product Description: The PiCam Permanent (with spectrometer) is part of the family of Ultraviolet (UV) cameras built by VolcanoTech in the Department of Geography, University of Sheffield. The PiCam Permanent (with spectrometer) is designed specifically for usage at volcanoes for measurement of sulphur dioxide (SO<sub>2</sub>) emissions. The system has a bespoke dual camera setup, is powered via 12V input, and provides ethernet capabilities. The PiCam Permanent (with spectrometer) incorporates an Ocean Insight spectrometer for calibration.

### Specifications:

<b>Connection</b>	Ethernet
<b>Power input</b>	12V DC
<b>Operating voltage</b>	5V DC
<b>Control</b>	2 x Raspberry Pi 3B+
<b>Storage (SD Cards)</b>	~120 GB
<b>Storage (SSD)</b>	~1 or 2 TB
<b>Exterior dimensions</b>	406 x 330 x 175 mm (casing only, not including lenses or lens cover)
<b>Interior dimensions</b>	380 x 266 x 153 mm
<b>Approximate weight</b>	4 kg

### Camera Specifications

<b>Lens</b>	Custom Triplet
<b>FOV (x)</b>	28°
<b>FOV (y)</b>	21°
<b>Image resolution</b>	648 by 486 (binned)
<b>Image format</b>	.png
<b>Acquisition rate</b>	Max 0.33 Hz

Data sheet approved by,

Dr Tom D. Pering  
14/03/2024