

OVMed®

# OH0138 Advanced Class Medical Image Processing Unit product brief



## Wi-Fi Connected IPU With High Image Quality for Endoscope CCUs

OmniVision's OVMed® OH0138 Image Processing Unit (IPU) is an FPGA-based, imaging solution featuring Wi-Fi output, advanced automatic exposure and gain control, RGB noise reduction, edge enhancement and RAW 8/10/12 image output. The OVMed® OH0138 IPU interfaces with our high-performance medical image sensors and can fit easily into an endoscope's camera control unit (CCU).

This IPU allows medical designers to leverage the benefits of our extremely small image sensors with easy integration into their systems, enabling a short time to market with high image quality.

Find out more at [www.ovt.com](http://www.ovt.com).



## Applications

- Medical Endoscopes and Catheters
- Industrial Video Scopes
- Veterinarian Endoscopes
- Security and Surveillance Monitoring Systems

## Product Features

- Integrated design:
  - Sensor
  - Processor bridge
  - ISP
  - Wi-Fi module
- 4-pin mixed-signal interface for OmniVision medical image sensors
- Advanced ISP delivers high-quality image sizes:
  - 400 x 400
  - 200 x 200
- Software tool for customer setting adjustments, easily adjustable system parameters with pre-defined buttons, including brightness, contrast, and saturation
- Supports AEC/AGC/AWB control
- Reconfigurable camera and display / control connected wirelessly
- Market-ready, end-to-end solution
- Supports battery power: 2 hour operation per full battery change

## Product Specifications

- Board size: L: 86 mm, W: 35 mm, H: 15 mm
- Power and charge connector: Micro USB
- Standard 5V power supply
- Wireless antenna: 1
- Battery power switch: 1
- Wireless output: Wi-Fi 802.11ac
- Power button: 1
- Image output formats: motion JPEG
- Input connector: 4-pin OmniVision AA module; 10-pin connector
- Image capture rate: 30 fps

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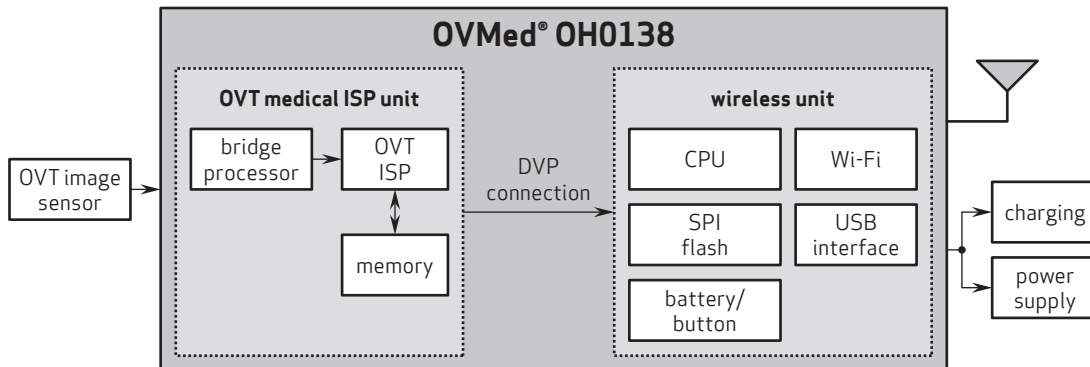
## Ordering Information

- **Contact Sales Rep**  
OVMed® Wi-Fi output board for OVMed® ISP (E2)

### Package includes:

- OmniVision camera AA module/daughter board with OV6946 image sensor
- PCB motherboard with OV6946 interface
- USB power adapter
- USB cable with micro USB connector
- Rechargeable battery
- CD-ROM containing:
  - Setup program
  - OVMED-WX-Plus User Manual
  - OVMED-WX-Plus Hardware Manual
  - OVMED-WX SDK Development Manual

## Functional Block Diagram



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