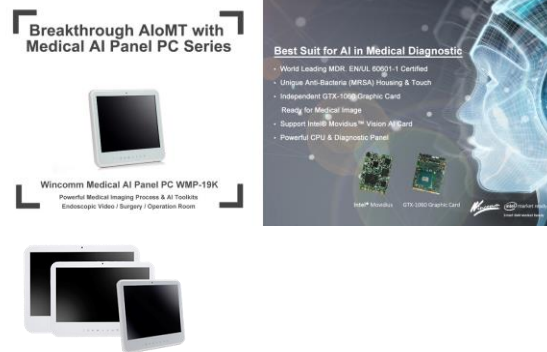


## AI-Powered Computing Ready Medical Panel PC for New

### Endoscopic System

**Wincomm new medical AI-Powered Computing Ready touch panel PC, WMP-19K, was used in JP hospital endoscopic system. Featuring on Coffee Lake Core i CPU, PCI-E x 4, optional GTX-1060 graphic card, and Intel® Movidius™ AI module, it is ideal to medical AI imaging solution with the newest MDR certification.**

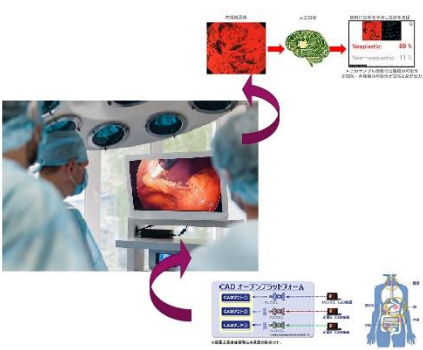



The AI-Powered Medical Panel PC WMP-19K/22K\*/24K\* comes with the Intel 9th generation Coffee Lake platform CPU. The size ranging from 19 inch to 24 inch WMP-K series has the highest utilization computing performance on its panel size, compare to average of medical grade panel PC industry. Continuously with strong hardware integration core competence, WMP-K series wins the optimization computing power on the same panel size and CPU platform, moreover, it is passed the latest medical certification with the best expansion flexibility, which is benefited from Wincomm highly integration with its own design capability. For example, Wincomm WMP K series is designed with an independent **GTX-1060 graphic cards**, and a PCI-E [x4] expansion slot, supporting **Intel® Movidius™ AI module, test proof**, and this design makes it powerful to support Medical AI on most imaging applications.

In addition to the significant increase in CPU performance and new customization options, the WMP-19K/22K\*/24K\* series is a continuation of the WMP series housing design. The anti-bacterial housing, including touch panel, is effective against MRSA (staph) which can't be reduced its effect by continuous alcohol cleaning the housing and a leading design to protect from second infection. With the safety design concept, WMP-19K/22K\*/24K\* can also be equipped with a 4KV Isolation COM / LAN / USB module, to avoid expansive equipment damage from signal and voltage feedback loops and ensure patients safety.

\*WMP-22K/24K by project support.

**Application**






► WMP-19K

**Features:**

- High Performance Computing Power
- Highest Level EMC 4.0/ Safety 3.1 Certification Ready
- Anti-Bacteria Plastic Housing, Including Touch Panel
- GTX-1060 MXM Module by Project Support
- Full HD Capture Card as Option
- Optional DICOM Part 14 Compliance
- Support RAID 0,1
- Support PCIe Expansions for AI-Based IoT Solution

**Application:**  
 Medical AI -  
 Assisted Diagnostic for Endoscopic System  
 Field Site: Japan  
 Model: WMP-15C, WMP-19K



We Commit We Deliver

Fig 1. Leveraging the high computing power with an independent GTX-1060 graphic card, WMP-19K was successfully used in colorectal endoscopic diagnostic at JP hospitals.

Currently, WMP-19K, was used in more and more endoscopic systems at hospitals from JP to global, and was passed local FDA approval notice together with Wincomm partners (Fig 1). The WMP-K series is designed to suit for AI-equipped endoscopic system at versatile application, such as colorectal diagnostic, bronchoscopy detection, and lung vision investigation. In addition, it has **USB3.1 gen II x 4 slots**, which transfer speed is up to 10Gbps, to conveniently connect other medical devices. The anti-microbial (MRSA) P-cap touch with frozen screen hot key design allows users to easily operate and easily clean the unit. Compared to SATA interface HDD or SSD, WMP-K series is upgraded its driving disk to M.2 NVMe with PCIe 3.0 [x4] interface, which resulted in the speed significantly (Fig 2).

SATA III Hard Drive	SATA III SSD	NVMe SSD
~100 MB/s Read	530 MB/s Read	3,500 MB/s Read
~100 MB/s Write	500 MB/s Write	3,000 MB/s Write

Fig 2. Performance comparison table from SATA III HDD, SATA III SSD to M.2 NVMe SSD.

In a hospital setting, medical panel PC's which connect high-end medical equipment such as a next generation AI-powered endoscopy system, must meet the following

\*WMP-22K/24K by project support.

conditions in order to be integrated into the hospital system.

## System Features

- ✓ Medical grade with anti-microbial surface is a must
- ✓ High performance computing power
- ✓ Quick booting time
- ✓ Expansion PCI-E slot for AI module or video capture card
- ✓ Battery pack 20-50 minutes
- ✓ USB3.1 gen II
- ✓ 2-4 x COM & 4-6 x USB slots
- ✓ PCAP touch and high resolution panel quality
- ✓ Powerful graphic card integration

All Wincomm medical grade PCs have acquired the latest Medical IEC-60601-1 4th edition certification, IEC-62133, Energy star 6.1 Compliance with FCC / CE / VCCI Class B; Furthermore, Wincomm WMP-K series has completed ready to provide the full secured product design with the newest MDR certification, effected since May 26, 2020. The WMP-K series is equipped with various I.O. ports, such as LAN x 2, COM x 2, and USB 3.1 gen II x 4, which are suitable to support any medical environment requirement in more compact design and capable to customization by project.

Medical AI Panel PC - WMP-19K (22" or 24" by project request)	
✓	Anti-Bacteria (MRSA) Plastic Housing & Touch Panel
✓	19" 1280x1024 LCD Diagnostic Panel
✓	<b>Intel® 9<sup>th</sup> Generation Core i5/i7 CPU</b>
✓	Supports Dual Channel DDR4 up to 64GB
✓	EN/UL 60601-1 Safety & EMC Latest Version & <b>MDR Certification Ready</b>
✓	<b>Independent GeForce GTX 1060 Graphic Card with 6GB dedicated video memory</b>
✓	<b>Support PCIe Expansion for Intel® Movidius™ Vision AI Card</b>
WMP-19K Standard I.O.	WMP-19K Isolated I.O.
• USB3.1 Gen II x 4	• USB3.1 Gen II x 4, ISO USB2.0 x 1
• RS-232 x 1, RS232/RS422/RS485 X 1	• ISO RS-232 x 1, ISO RS232/RS422/RS485 x 1
• RJ45 X 2	• RJ45 X 2, ISO RJ45 x 1
• Line-out, Mic-In	• Line-out, Mic-In
• DP X 2	• DP X 2

If you have any product or customization requirements, please contact Wincomm sales (mail: [sales\\_support@wincomm.com.tw](mailto:sales_support@wincomm.com.tw)), and visit Wincomm at <http://www.wincomm.com.tw/>

\*WMP-22K/24K by project support.