

# IP65 FRONT PANEL PC (Metal-5mm)



4:3, 9.7" LCD Monitor 1024x768, LED-350nits, Rear OSD, including rear screw/Clamp/VESA Mount, WV(160°/160° IPS), 12VDC-IN w/Adapter with 5 Wire Resistive Touch Screen + MS-98F5 ( J1900 ) / RAM 4GB ( 0C~70C ) / SSD 256GB ( 0C ~70C )

**MODEL: CPM0970WV-J-TR**



## FEATURES:

- Modularize mechanical design provides flexible product configuration and easy maintenance
- Optional build-in touch screen for interactive application
- Intel® Celeron® Processor J1900
- Embedded Mini-ITX Motherboard with low power, slim and fanless design
- 2 independent displays: LVDS and VGA
- Supports 6xCOMs and 8xUSB 2.0
- Entry level with best-value for choice

## SPECIFICATIONS:

|                     |                            |   |
|---------------------|----------------------------|---|
| Panel               | Cell Type / Glass Surface  | TFT LCD / Black Anti-Glare, low reflection coating      |
|                     | Aspect Ratio / Size        | 4 : 3 / 9.7" viewable diagonal area                     |
|                     | Active Area / Pixel Pitch  | 196.608(H) x 147.456(V) mm / 0.192(H) x 0.192(V) mm     |
|                     | Native Resolution / Colors | 1024(H) x 768(V) / 16.2 M                               |
|                     | Brightness / Contrast      | 350 cd/m <sup>2</sup> (typ) / 600 : 1                   |
|                     | Response Time              | < 35 ms   |
|                     | Viewing Angle (typical)    | H. 160° (- 80° ~ + 80°) , V. 160° (- 80° ~ + 80°)       |
|                     | Light Source               | LED backlight, Long life, 35,000 hrs (typ)              |
| Power               | Power Input                | 12V DC input with adapter                               |
|                     | Power Consumption          | 20.3 Watt, <1 Watt                                      |
| Operating Condition | Temperature / Humidity     | 0°C ~ 50°C (32°F ~ 122°F) , 10% ~ 90% (no condensation) |
| Dimensions          | Physical                   | Please refer to Drawing                                 |
|                     | Carton                     | W x H x D = TBD   |

|         |                  |                      |                          |                              |
|---------|------------------|----------------------|--------------------------|------------------------------|
| Options | Touch            | Video / TV           | Enhanced Panel           | Others                       |
|         | Resistive touch  | SV + AV              | Panel with LED backlight | Digital Signage(Stand alone) |
|         | Capacitive touch | SV + AV + AV_Looping | High brightness panel    | Networking Digital Signage   |
|         | SAW touch        | SV + AV + TV         | Wide Temperature         | Motion Sensor                |
|         | Infrared touch   |                      | Sunlight Readable        | Light Sensor                 |
|         | Protected glass  |                      |                          | Auto-Dimming                 |

## MS-98F5 MB Specifications



919-98F5-101(low profile)



919-98F5-103(low profile)



|                   |                       |  |
|-------------------|-----------------------|--|
| Processor         | CPU                   | Intel® Celeron® Processor J1900, QC, 10W   |
|                   | Frequency             | J1900, 2.0 GHz, up to 2.42 GHz   |
|                   | L2 Cache              | 2 MB   |
|                   | CPU Type              | BGA  |
|                   | Chipset               | Integrated   |
|                   | BIOS                  | AMI  |
| Memory            | Technology Max.       | Dual-channel DDR3L 1333/1066 MHz   |
|                   |                       | Up to 8GB  |
| Display           | Socket                | 2 or 1 x 204-pin SO-DIMMs (depends on SKU)   |
|                   | Controller            | Intel® HD Graphics   |
|                   | Graphic Memory        | Shared system memory up to 1.7 GB SDRAM  |
|                   | LVDS                  | Dual Channel 24-bit (add chrontel 7511B chipset)   |
|                   | VGA                   | 1  |
|                   | Multiple Display      | 2 independent displays   |
| Ethernet          | Display Interface     | VGA up to 2560 x 1600 @60Hz LVDS up to 1920 x 1200 @60Hz   |
|                   | Controller            | 2 or 1 x Realtek® RTL8111G-CG GbE LAN (depends on SKU)   |
| Audio             | Controller            | Realtek® ALC887 HD Audio Codec   |
| Super I/O         | Controller            | Fintek F81866AD-I  |
| H/W Monitor       | Watchdog Timer        | 256-level Watchdog Timer   |
|                   |                       | Yes  |
| TPM               | Controller            | Pin header   |
| I/O Interface     | USB                   | 8 x USB 2.0 (4 x internal; 4 x rear)   |
|                   | Serial                | 6 x COM ports (COM1: rear, COM2-6: internal)<br>COM1: RS-232, 0V/5V/12V<br>COM2-6: RS-232, w/o power |
|                   | Parallel              | 1 (Pin header)   |
|                   | PS/2                  | 1 (Pin header)   |
|                   | GPIO                  | 8-bits (4 x GPI, 4 x GPO), 3.3V  |
|                   |                       |  |
| Expansion Slot    | PCIe x1               | 1  |
|                   | M.2                   | N/A  |
|                   | Mini-PCle             | 1 x Full-size (w/ mSATA)   |
| Storage           | SATA                  | 1 x SATA 2.0   |
|                   | mSATA                 | 1  |
| Power Supply      | DC                    | DC-in 12V  |
|                   | ATX                   | N/A  |
| Environment       | Operating Temperature | 0 ~ 60°C   |
|                   | Operating Humidity    | 10 ~ 90%, non-condensing   |
|                   | Storage Temperature   | -20 ~ 80°C   |
|                   | Storage Humidity      | 10 ~ 90%, non-condensing   |
| Form Factor       | Dimensions            | 170 x 170mm (Mini-ITX)   |
|                   | Weight                | 0.37 kg  |
| Certification     | EMC                   | FCC, CE, RCM, VCCI, BSMI   |
| Software Platform | OS Support            | Windows 7 (32/64-bit) Windows 8 (32/64-bit) Windows 10 (64-bit)                                      |

## MECHANICAL DRAWING:

