

PANEL 12

12" All-in-One Solution for Industrial Applications

General Description

The silent, space-saving PANEL12 is specifically designed as front end interface for rugged, secure sensitive environments where reliability and quality are major issues. The PANEL12 expands MPLs Panel PC family of compact, easy-to-integrate and multifunctional All-in-One solutions. The product is specifically designed and built for none standard environments. It combines a 12.1" display with excellent optical specifications, a touch screen and a complete low power CPU based single board computer (PIP). All this comes within the footprint of a 12" LCD monitor and saves space on your working place.

The PANEL12 can be mounted over a standard VESA75 on a swivel arm, an adjustable desktop stand or on the wall. The user has the choice between an externally powder coated aluminum or a full stainless steel housing. The product offers a full (all around) protection of up to IP65 / NEMA4. On the back either through IP65 protected cable openings or behind a cover plate (IP54) various PC interfaces are available for the user. Like all other MPL products the PANEL12 comes without a fan or air vents, is very flexible and expandable for all customer needs and requirements.

Applications

The robust and all around IP65 protected PANEL12 is the perfect solution as man machine / front end interface for harsh applications like in traffic, transportation, maritime or for clean environments like in medicine, food industry. Further as space saving, IP54 protected, fanless and noiseless system the PANEL12 is an excellent solution for desktop applications in telecommunication, kiosk information systems and Internet access points where a quality product is an issue.



Various PANEL12 solutions in aluminum and stainless steel

The PANEL12 Features

- Space saving, integrated, All-in-One solution
- Silent, fanless design
- Up to IP65 protected all around
- Stainless steel or aluminum housing
- Functions as desktop or wall-mountable system
- Choice of wide processor range (up to Intel Core 2 Duo)
- With an integrated hard disk or solid-state flash drive
- Optionally easy operation, navigation over touch screen
- Optionally extended temperature solution available
- Choice of various operating systems



PANEL12 with adjustable stand



Technical Data PANEL12

CPU Boards / Motherboards

Use of our reliable, long-term available Embedded Computer Boards out of the PIP Family.

All boards are well equipped and offer the standard interfaces on board.

CPU Range	Offer from Celeron M 600MHz up to a Intel Core 2 Duo 1.5GHz
Memory	Up to 3GB possible, depends on selected CPU board
Storage	Wide selection of HDD or solid-state Flash drive available
I/Os	As standard we offer external: 1x Ethernet, 1x USB, 2x PS/2 (KB, Mouse) and 1x Power Other interfaces (Serial, LPT, FW,...) on request, please talk to us about your needs
Expansion	Internal over PC/104-Plus various Fieldbus or other features possible MPL offers a wide range of Add-on modules for the CPU boards (WLAN, UPS, GPS, CAN,...)

LCD Characteristics

We are not aligned to a certain display type, therefore please ask us in case you have specific needs.

The below given values are from our used standard 12.1" LCDs.

Display Size	12.1" TFT LCD	12.1" TFT LCD
Resolution	VGA (800x600 pixels), Aspect ratio 4:3	XGA (1024x768 pixels), Aspect ratio 4:3
Color Depth	262k	16.2M
Brightness	450 cd/m2	500 cd/m2
Contrast Ratio	600:1	700:1
Viewing Angle hor.	70/70 (left / right)	80/80 (left / right)
Viewing Angle ver.	50/60 (up / down)	80/80 (up / down)
Backlight	CCFL – dimmable	LED - dimmable

Touch Screen (Optional)

Type	Resistive touch screen, capacitive or infrared on request
Surface	Hard coating, antiglare treatment
Controller Resolution	1024 x 1024
Controller Interface	Standard over PS/2 (optional RS232 or USB), touch and mouse simultaneously possible!

Housing Characteristics

Surface	Stainless Steel (S) or Aluminum (A)
Case color	Stainless Steel: brushed Aluminum: powder coated in RAL7035 (optionally other RAL color)
Mounting Options	75mm or 100mm VESA mount, four M4 bolts on back, other solution on request
Weight	Aluminium 4.6 kg and Stainless Steel 6.0 kg



VESA mounting

Physical

Power Supply	Standard +12VDC input, other voltage range on request
Power Consumption	Display & Inverter typ. 5W / 13.6W, please add CPU board power consumption according data sheet
Temperature Range	Aluminium: Standard 0°C up to +40°C, Extended temperature solution for -30°C up to +70°C Stainless steel: Standard 0°C up to +35°C, Extended temperature solution for -30°C up to +65°C
Humidity	10% - 90% non condensing
Protection Class	All around IP65 (optionally front and side IP65, back IP54), please talk to us about your needs

Professional engineering, support and consulting through MPL engineers on HW and SW.

The PANEL12 is fully developed, designed and produced by MPL AG in Switzerland.

