Industrial control panel HMI MKS-102AS IP65 2xCOM Port + Ethernet + SD

Category:	HMI Operator Interface Panels
Manufacturer:	Mobilator
Power:	24V
Dimensions:	266 x 208 x 40mm
:	ModbusPPIMPI
:	128MB
:	ARM A8 Core 400MHz
:	-----
:	1x USB 2.0 Host1x USB 2.0 Slave2xRS232/422/4851x SD card slot1x RJ-45 LAN
Weight:	~2000g
Expansion:	-----
Humidity:	10% - 90% non-condensing
Temp:	0°C - 50°C
Storage Temp:	-20°C - 60°C

Graphic Card:	-----
IP Norm:	IP65 (front panel)
LAN:	Yes
Bluetooth:	-----
Screen size:	10.2"
Resolution:	800x480px
Supported OS:	Linux
Touchscreen:	4-wire resistive
Installed OS:	Linux
Contrast Ratio:	-----
Brightness:	500cd/m²
Fanless:	Yes
Color Resolution:	266144
Housing material:	PC/ABS
Power Consumption:	8W
Others:	-----

Product from the Archive - production finished
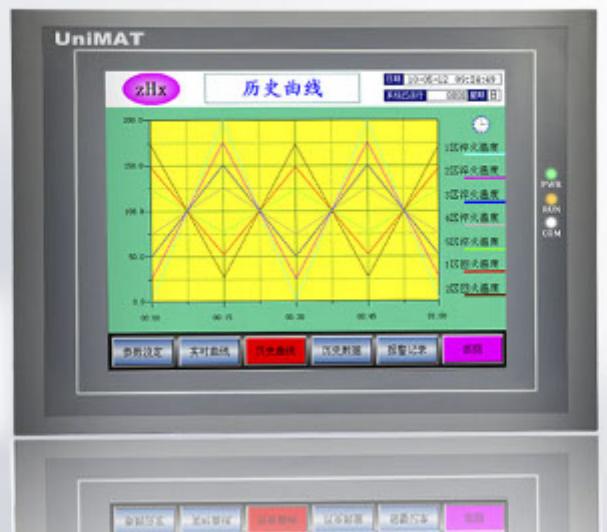
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Application

Industrial operator panels also known as control panels are devices that control other electronical devices using convenient and intuitive touch interface. Thanks to its robust design, these devices are suitable for use even in harsh environments. Model MKS-102AE has a IP65 standard which classifies and rates the degree of protection provided against intrusion (body parts such as hands and fingers), dust, accidental contact, and water by mechanical casings and electrical enclosures.

Specification

Processor	ARM Cortex A8 400MHz
RAM	128MB
Display	10.2" TFT (800x480)
Touchscreen	4-Wire Resistive
Flash memory	128MB
Connectors	USB 2.0 Host	USB 2.0 Slave	RS232/422/485	RJ-45 LAN| SD Card
Operating system	Linux
Communication protocols	Modbus/MPI/PPI
Dimensions	266mm x 208mm x 40mm

Weight	~2000g
Protection	IP65 (Front panel)

Check "Available versions" tab to see available configurations of this device. To get more information about this product click "Ask about the product" or use the **Contact form**.

Description
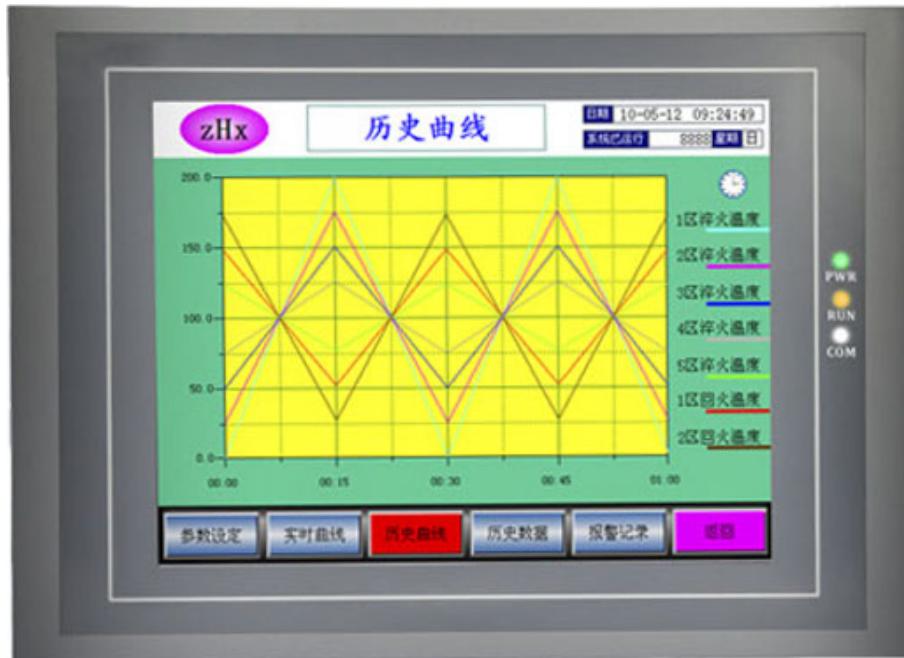
Multitasking OS

HMI is equipped with an operating system from Linux family, which ensures maximum efficiency of the device and easily copes with multiple processes simultaneously. Convenient interface makes the operator panels as much intuitive as possible.

Efficient processor

An important advantage of the HMI MKS-102AE is a powerful combination of small size with considerable capabilities through the use of the processor family ARM Cortex A8 with 400MHz clock speed, which, combined with 128MB of RAM gives us a

powerful, multi-purpose, quality device for a low price.

Small size

HMI MKS-102AE is equipped with a 10.2 inch screen and the overall size of its design is only 266mm x 208mm x 40mm and its weight is only 2kg. With such a small size it can be used in even if there is not much available space. In addition, HMI has the possiblility to mount it on a wall for the greatest convenience and ease of access.

Solid construction

HMI enclosure is made from a specialized blend of PC / ABS (polycarbonate / acrylonitrile-butadiene-styrene)providing a very high resistance to mechanical damage. With this construction it is ready for use even in extreme conditions such as heat, cold or vibration at any time. In addition, the front panel of the device has IP65 international standard, which confirms the water resistance and a complete protection against dust.

Low power consumption

Using the latest technology, HMI MKS-102AE is designed for continuous operation with low power consumption of less than 8W at 24V.

Protection

IP65 RESISTANCE

IP stands for Ingress Protection and is essentially a rating system developed by the International Electrotechnical Commission or the IEC. The system is now being used to classify different degrees of protection against intrusion or immersion. The IP rating is usually followed by two digits. The first indicates the level of dust-resistance, the second water resistance. Dust-resistance levels goes from 0 up to 6 while water-resistance goes from 0 to 8.

No protection	0		0	No protection
Protection against any large surface of the body, such as the back of a hand	1		1	Protection against vertically dripping water
Protection from object > 12mm, e.g. Fingers or similar objects	2		2	Protection against vertically dripping water when device is tilted at an angle up to 15 degrees

Protection from object > 2.5mm, e.g tools, thick wires, etc.	3	3	Protection against direct sprays of water when device is tilted at an angle up to 60 degrees
Protection from object > 1mm, e.g. most wires, slender screws, large ants etc.	4	4	Protection from sprays and splashing of water in all directions
Dust protected - Ingress of dust is almost entirely prevented.	5	5	**Protection from low pressure water projected from a nozzle with a 6.3mm diameter opening in any direction**
Dust tight - No ingress of dust, complete protection against contact.	6	6	Protection from water projected in powerful jets from a nozzle with a 12.5mm diameter opening in any direction
—	7	7	Protected from immersion in water with a depth of up to 1 meter (or 3.2ft) for up to 30 mins
—	8	8	Protected from immersion in water with a depth of more than 1 meter

Work temperature	0 - 50
Storage temperature	-20 - 60
Humidity	10% - 90% (non-condensing)
Dust resistance	IP6x
Water resistance	IPx5

Available versions

Select a version tailored to your needs. Clicking on the hardware number configurations will redirect you to the product with parameters listed below. At the customer's request can be created configurations which are not available in the offer. Detailed parameters are available in the "Technical Data".

	LAN connector	SD card slot
MKS-102AE	—	—
MKS-102AS		

Communication

MODBUS

Modbus is a serial communications protocol initially for use with programmable logic controllers (PLCs). Simple and robust, it has since become a standard communication protocol, and it is now a commonly available means of connecting industrial electronic devices. Modbus enables communication among many devices connected to the same network, for example a system that measures temperature and humidity and communicates the results to a computer. Modbus is often used to connect a supervisory computer with a remote terminal unit (RTU) in supervisory control and data acquisition (SCADA) systems.

CONNECTOR TYPE	QUANTITY
USB 2.0 Host	1
USB 2.0 Slave	1
RS232/422/485	2
RJ-45 LAN	1
SD card slot	1
DC 24V	1

PLC

PLC is a universal microprocessor device designed to control the operation of the machine or technological equipment. PLC must be adapted to the HMI device by

introducing into its memory the desired algorithm for operation of the plant. A characteristic feature of the PLC controller distinguishes this from other drivers computer is cyclic circulation of program memory. The algorithm is stored in a dedicated controller programming language. You can change the algorithm by changing the contents of program memory. The driver provided with a suitable number of input circuits gathering information on the object status and requests service and the appropriate number and type of output devices connected to the actuators, signaling or data.

PLC is not included in the standard equipment - it must be purchased separately.

Application

Warehouse

Industrial HMI operator panel can be used to connect multiple devices in the warehouse and make them easier to control. And its robust design is perfectly designed for the harsh conditions prevailing in these areas. Dust or dirt will not prevent this device from working, it will work flawlessly even in polluted environments.

Smart Home

Thanks to its transparent and intuitive touch interface, the HMI device can be easily adapted to the Smart Home, this solution allows you to control functions such as music, heating and air conditioning, from one place. The ideal device for people who like to have everything at your fingertips.

available in the **Technical data** tab.

Thanks to the ease specific tasks, it's wid and mediation betw processes, giving you situations.