



Industrial COntrol Panel HMI N7050PI



Category:	HMI Operator Interface Panels
Manufacturer:	Mobilator
Color:	Gray
Processor:	ARM A8 Core 600MHz
Communication protocols:	Modbus
ROM:	128MB
RAM:	128MB DDR3
Screen size:	10.2"
Resolution:	800x480px
Touchscreen:	4-wire resistive
Graphic Card:	-----
LAN:	Yes
Bluetooth:	No
Power:	24V
Supported OS:	Windows CE 7.0 / Linux / WECON OS (Dedicated)
Installed OS:	-----
Dimensions:	272mm x 190.5mm x 41.4mm
Weight:	~600g
Expansion:	-----

Connectors:	1x USB 2.0 Host 1x USB 2.0 Client 1x RS232/422/485 1x RS232/485 1x RJ-45 LAN
Fanless:	Yes
Humidity:	10% - 90%
Temp:	-20°C - 60°C
Storage Temp:	-20°C - 70°C
IP Norm:	IP65 (front panel)
Contrast Ratio:	500:1
Brightness:	300cd/m ²
Color Resolution:	260k (18bit)
Housing material:	ABS
Power Consumption:	Less than 10W
PLC:	No
Digital I/O (PLC):	-----
Analog I/O (PLC):	-----
Output type (PLC):	-----
COM port (PLC):	-----

Product from the Archive - production finished



Specification

Description

Available versions

Protection

Communication

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 N7050PI 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 600MHz
Screen	10.2" (800x480), Resistive
RAM	128MB
Flash memory	128MB
Connectors	USB 2.0 Host USB 2.0 Client COM: RS232/422/485 RJ-45 LAN SD Card
Operating system	Windows CE 7.0 Linux WECON OS (Manufacturer's dedicated system)
Dimensions	272mm x 190.5mm x 41.4mm

Weight	~1200g
Protection	IP65 (Front panel)
PLC Protocols	Standard Modbus

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 can be equipped with a Windows CE, Linux or WECON operating system, 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 N7050PI is a powerful combination of small size with considerable capabilities through the use of the processor family ARM Cortex

A8 with 600MHz clock speed, which, combined with 128MB of RAM gives us a powerful, multi-purpose, quality device for a low price.

Small size

HMI N7050PI is equipped with a 10.2 inch screen and the overall size of its design is only 272mm x 191mm x 41mm, with a cutout size of 260mm x 179mm and its weight is only 1.2kg. With such a small size it can be used in even if there is not much available space. In addition, HMI has the possibility 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 ABS 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 N7050PI is designed for continuous operation with low power consumption of less than 10W at 24V.

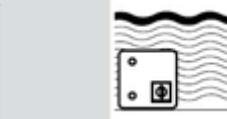


Protection

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
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Work temperature	-10 - 60
Storage temperature	-30 - 70
Humidity	10% - 90%
Dust resistance (Front panel)	IP6x
Water resistance (Front panel)	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".

SUPPORT FOR INDIVIDUAL OPERATING SYSTEMS

	WECON OS
Development tool	PI Studio
Cost	Free
System tool	Display adjust Communication parameters configuration
Documentation	Yes
Technical support	Professional support for hardware and software development
Default screen	WECON factory screen

	WINDOWS CE 7.0
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Development tool	Visual Studio .NET
Cost	Free (not licensed) / Paid (licensed)
System tool	CETOOL tool
Documentation	Microsoft documentation
Technical support	Driver developmnet only
Default screen	Windows CE 7.0 desktop

	LINUX
Development tool	Qt
Cost	Free
System tool	No
Dokumentacja	No
Technical support	Driver developmnet only
Default screen	Standard Linux command line

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 Client	1
RS232/422/485	1
RS232/485	1
RJ-45 LAN	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



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



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 environments.

available in the **Technical data** tab.

