Modbus

RS-232/422/485

USB

LAN

IP 65

Industrial Control Panel HMI N9030PI

Category:	HMI Operator Interface Panels
Manufacturer:	Mobilator
Supported OS:	Windows CE 7.0 / Linux / WECON OS (Dedicated)
Installed OS:	-----
Screen size:	12"
Resolution:	1920x1080px
Brightness:	300cd/m²
Touchscreen:	4-wire resistive
Processor:	ARM A9 Core 1.4GHz
Graphic Card:	-----
RAM:	512MB DDR3
ROM:	8GB EMMC
IP Norm:	IP65 (front panel)
Temp:	-20°C - 60°C
Storage Temp:	-20°C - 70°C
Humidity:	10% - 90%
Others:	IP camera support | Remote control support | Wi-Fi support
LAN:	Yes
Wi-Fi:	No

Bluetooth:	No
Connectors:	1x USB 2.0 Host1x USB 2.0 Client2x COM1x RJ-45 LAN
Communication protocols:	Modbus
PLC:	No
Digital I/O (PLC):	-----
Analog I/O (PLC):	-----
Output type (PLC):	-----
COM port (PLC):	-----
Expansion:	-----
Power:	24V
Power Consumption:	Less than 10W
Contrast Ratio:	500:1
Color Resolution:	16000k (24bit)
Housing material:	ABS
Color:	Gray
Dimensions:	312.5mm x 208.9mm x 49mm
Fanless:	Yes
Weight:	~2200g

Product from the Archive - production finished

HMI N9030PI

Textile Machine

| Speed | 20 | Cloth | 2868 |

	GB1	GB2
Quantity	62	73
Time	4249.0	3328.0
Perimeter	13	8
Cycles	7237	863l

Auto
Manual
Stats
Support

MODBUS

IP65

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 N9030PI 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 A9 1.4GHz
Screen	12" (1920x1080), Resistive
RAM	512MB DDR3
Flash memory	8GB EMMC
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	312.6mm x 208.9mm x 49mm
Weight	~2.2kg
Protection	IP65 (Front panel)
PLC Protocols	Standard | Modbus
Other	CANBUS (option) | IP camera support | Remote control support | Wi-Fi support

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 N9030PI is a powerful combination of small size with considerable capabilities through the use of the processor family ARM Cortex A9 with 1.4GHz clock speed, which, combined with 512MB of RAM gives us a powerful, multi-purpose, quality device for a low price.

Small size

HMI N9030PI is equipped with a 12 inch screen and the overall size of its design is only 312mm x 209mm x 49mm, with a cutout size of 305mm x 201mm and its weight is only 2.2kg. 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 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.
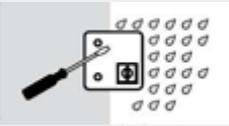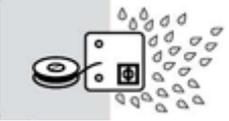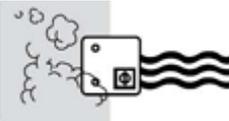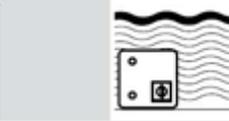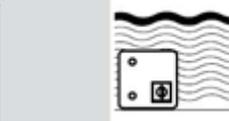
Low power consumption

Using the latest technology, HMI N9030PI 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

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 sceen

	WINDOWS CE 7.0
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

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.

Connectors:

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

COM Ports:

PORT NUMBER	SUPPORTED PROTOCOLS
COM1	RS232/RS485 or RS232/RS422
COM2	RS232/485
COM3 (COM2 port)	RS485

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.

REMOTE CONTROL

The HMI N9030PI allows you to remotely connect to your device via Ethernet, allowing you to fully control the HMI and display its screen in real-time on a device
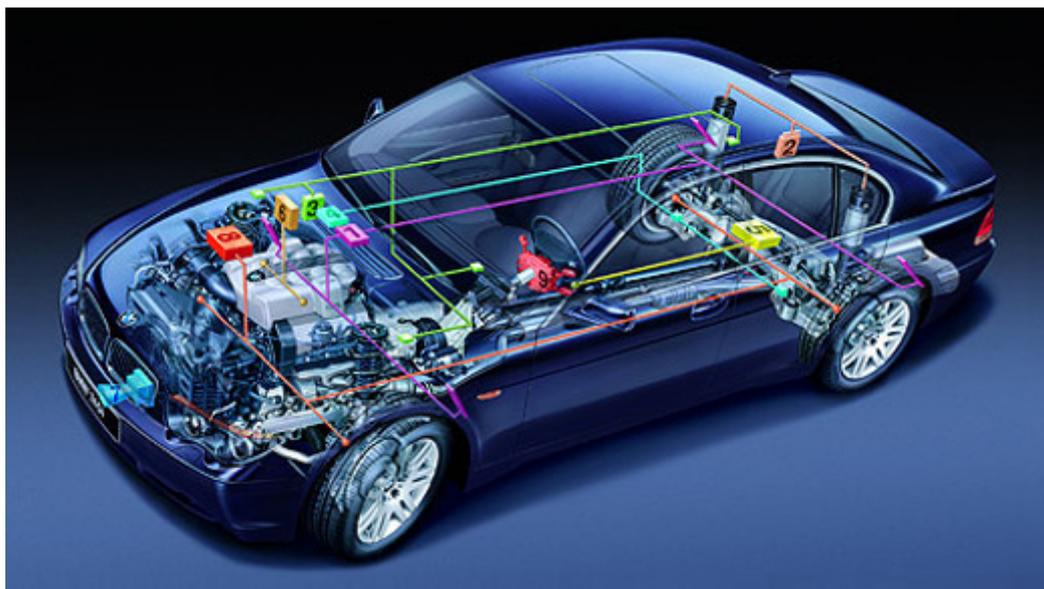
connected to it via a web browser. With this solution, you can connect several devices to one main computer and manage the network from one place.

IP CAMERA SUPPORT

IP cameras are devices that record and transmit live video directly over the IP network, allowing authorized users to observe on-site or off-site. View, save and manage video from this camera is done through a standard IP-based network infrastructure. The HMI N9030PI allows you to connect this camera using an ethernet port so that you can view and control the camera image directly on the panel screen.

CANBUS SUPPORT (OPTION)

CAN is an asynchronous serial bus for data exchange. It has been designed for the automotive industry to increase the reliability of systems such as ABS and engine control. This is commonly used in a variety of fields, primarily in the automotive

industry, where a digital bus is based on the CAN bus. It is the primary aggregate medium for sensors, actuators, and auxiliaries. The CAN standard priority technology allows you to delimit control on one side of extremely important components, such as airbags, on the other hand, trivial issues such as the transmission of data between additional equipment.

Application

Warehouse

Thanks to its transparent and intuitive user interface, the HMI device can be easily adapted to the Smart Home, this solution allows you to robust design is perfectly design for the harsh conditions prevailing in these areas. Due device for people who like to have everything at your fingertips work flawlessly even in polluted environments.

available in the **Technical data** tab.

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