

Monitoring and remote control

Ethernet – WIFI - GPRS

NIDUS-iT is an expansion platform for Rabbit MiniCore modules, series 6000.

Its main feature, consists in monitoring a wide variety of sensors and react to pre-defined criteria.

The **NIDUS-iT** platform, was developed with the objective of integrating functions normally available in various devices. The definition of criteria is user-friendly in that it is intuitive and of easy configuration.



Characteristics - Hardware

- Up to 32 external sensors (Modbus/ASCII)
- 1 analog output 0-10V
- 16 digital output
- 11 digital input (protected w/ Optocoupler)
- 1 Ethernet Port
- 2X RS232 / RS485 Module
- GSM Communication (OPTION)
- RF 868 Mhz Module (OPTION)
- Server/Client function

Environmental monitoring solution and remote control of In/Out. The device can register data and send all type of alarms.

- Integration of SCADA and CLOUD systems. Various communication protocols available.
- SIMPLE WEB Interface and easy understanding.
- Integration of various external devices via different communication protocols Modbus/RTU, ex: Analyzer/energy counters, water, weather stations, etc. ...
- Stores up to 200'000 records. The records may be individually configured.
- Intelligent system of transfer of records

Characteristics - Firmware

- Configuration via built-in WEB browser
- User authentication
- Direct and programmed reaction of events
- Remote control of digital outputs
- Communication Modbus/RTU w/ external devices
- Easy integration w/ external systems (XML)
- Thermostatic function
- Verification of state of devices in network (Watchdog)
- Graphic visual in real time
- Individual parameterization of In/Out state (Alarm e records)
- Internal memory of 200'000 records
- Protocols: TCP/IP, UDP/IP, SNMP, HTML, XML, PUSH/XML, Modbus (RTU and ASCII), SMS and E-mail

The screenshots show the NIDUS-iT web interface. The top screenshot displays a sensor data table and a real-time graph for 'Temp Office'. The middle-left screenshot shows configuration settings for a 'Ventilador' digital output, including 'Enabled', 'Name', 'Alarm', 'Delay', 'Invert', and 'State'. The middle-right screenshot shows user management settings, including 'User Settings' and 'Access Rights' for various users. The bottom screenshot shows configuration for 'Analog/Digital Output Reactions' and 'SMS and Email Reactions'.

APPLICATION:

Where exists the need to monitor, register and control various types of sensors such as:

- Agriculture: Greenhouse management, irrigation systems, etc. ...
- Industry: Food, Pharmaceutical, Hospital, etc ..
- Buildings: Security management, HVAC, Energy management, etc ..