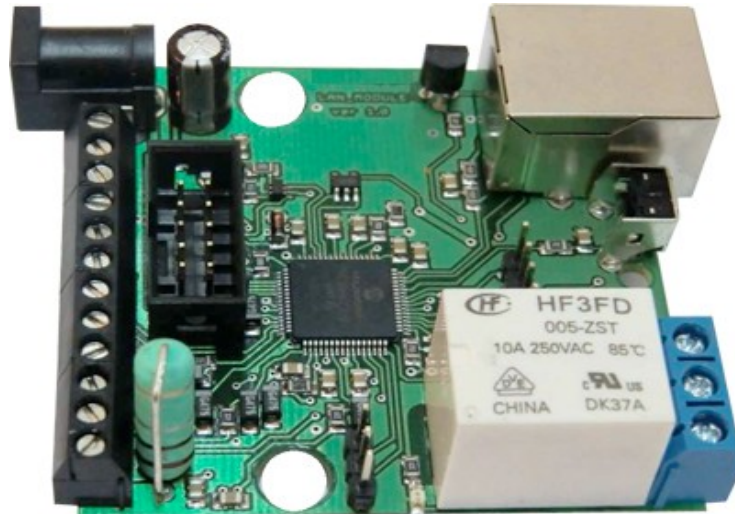


# LAN CONTROLLER instruction from 2.30



## **RESTARTER, MONITOR, WATCHDOG, CONTROLLER**

### **FEATURES:**

- WWW or SNMP v2 management.
- firmware upgrade via TFTP
- read data in real time without refresh page
- read all sensors by xml "st0.xml"
- switching output by the command from your browser (IP/outs.cgi?outx=x)
- possibility switch on/off to 5 relay direct from page WWW
- events panel to self-programming by user
- Scheduler (switch on/off output for definite time in week days)
- Watchdog IP to five IP device
- monitoring of additional devices eg. sensors
- measurement: environment temperature, supply voltage, temperature and current from connected sensors
- power measurement for DC voltage
- possibility connection of the additional board with RJ45 ports (4 LAN Input, 4 relay LAN + PoE) or additional board with 4 relays
- Set time manually or by server NTP
- Possibility sensors calibration
- steering frequency and duty PWM
- e-mail notification about programmed events
- SNMP TRAP notification about programmed events
- Automatic send SNMP TRAP with state or value inputs
- implement protocols: HTTP, SNMP, SMTP, Sntp, ICMP, DNS, DHCP.
- service temperature sensors: NTC10K B=3380, KTY-84, PT1000, DS18B20

**Default user and password is „admin”, IP address is 192.168.1.100**

## **TECHNICAL SPECIFICATIONS**

- supply voltage: 8-56V (from 6V- if don't use measurement current and PT1000)
- power consumption : about 1W
- PoE supply: YES, passive
- Protection from wrong supply polarization: YES
- interface: ethernet 10Mbit/s
- relay: 255VAC 10A
- work temperature: -20 do +85 st. C
- weight 45g (without casing)
- casing type Z-67 (not included)
- dimensions 57x67mm

### ***INPUT/OUTPUT:***

- 1 RELAY to switch on/off/ another devices, available contact: NC and NO
- 4 OUTPUT to switch **relays, ports PoE or** another devices;
- 1 STEERABLE OUTPUT PWM from 2,6 KHz to **4Mhz**;
- 4 LOGICAL INPUT (2 on terminal block- max 12V, 2 on 5 pin connector-max 5V): to monitoring another devices, eg. bufor supply. collaboration with outputs: OC,NO, NC
- **5 ANALOG INPUT:**

INP1: temperature measurement witch thermistor NTC 10K B=3380( from -40 to +120 °C) or thermistor KTY-84-130 (from -40 to +300°C), accuracy 1 °C (dependent on NTC)

INP2: thermistor NTC 10K or voltage measurement to 3,6V, with use additional divider increase range..

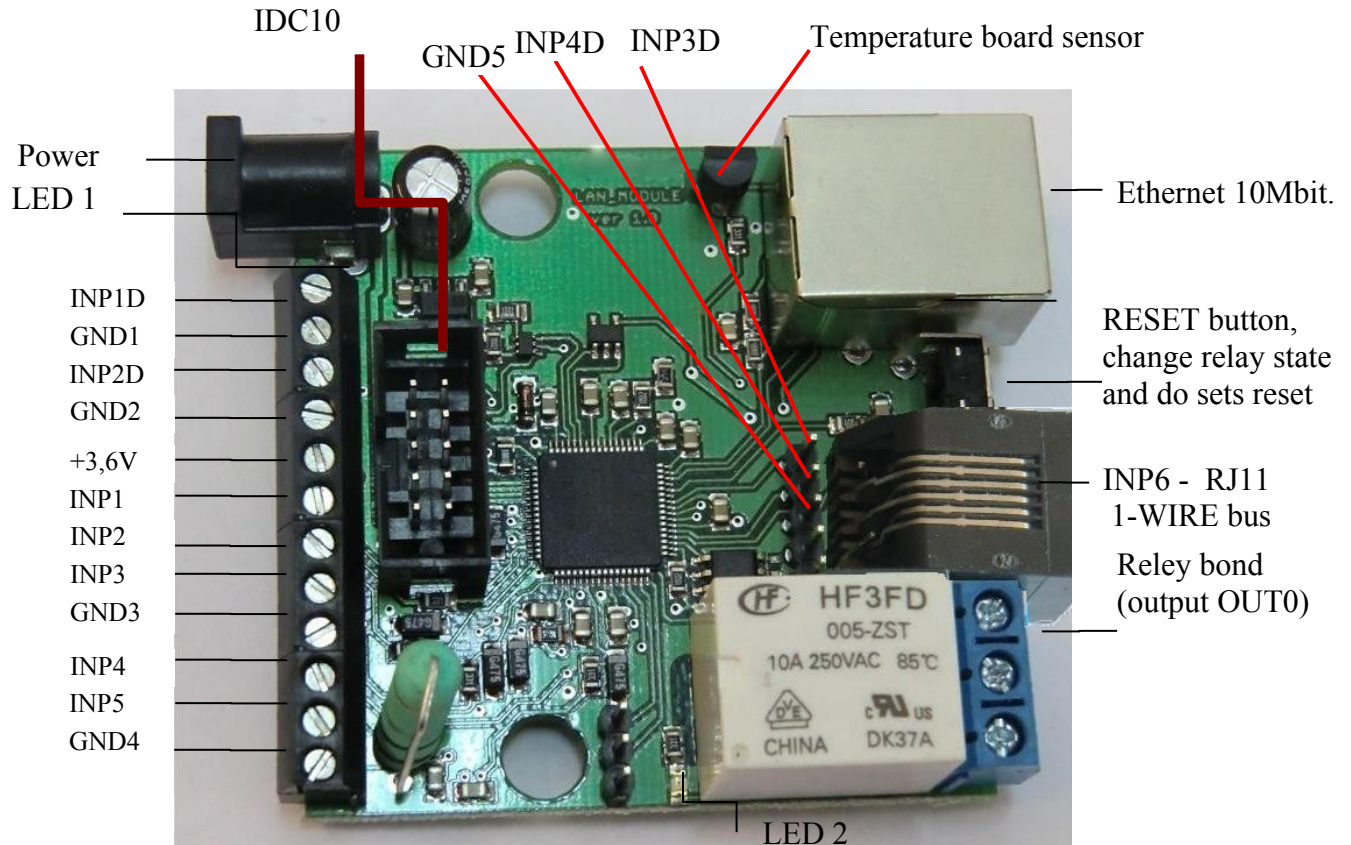
INP3: voltage measurement to 35V, accuracy +- 0,1V;

INP4: temperature measurement by PT1000 (from -20 to +850 °C) accuracy +- 2°C;

INP5: measurment DC current to 3A, accuracy +- 10mA;

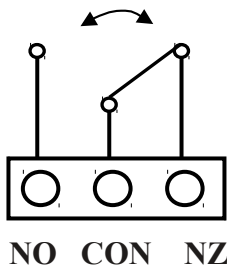
- **MAGISTRALA 1-WIRE (connector RJ11)** – to DS18B20 sensor, max 4 pcs in soft version 3.xx(without Watchdog) max 6 pcs.

## PINS and COMPONENTS DESCRIPTION



| PIN/Component     | Description   |
|-------------------|---|
| <b>Power</b>      | Power suply 8V-56VDC or via PoE   |
| <b>RELAY bond</b> | To connect external device, <a href="#">detail description below</a>        |
| <b>LED1</b>       | Shine LED means Power on board  |
| <b>LED2</b>       | Shine LED means relay active  |
| <b>IDC10</b>      | To connect additional board , <a href="#">detail description below</a>      |
| <b>INP1D</b>      | Logical input 1   |
| <b>GND1</b>       | gnd for INP1D and INP2D or general gnd                                      |
| <b>INP2D</b>      | Logical input 2   |
| <b>GND2</b>       | general gnd   |
| <b>+3,6V</b>      | Supply for sensors NTC-10K and KTY-84 connected to INP1 or INP2             |
| <b>INP1</b>       | input for sensor NTC-10K or voltage measurement max (without divider ) 3,6V |
| <b>INP2</b>       | input for sensor NTC-10K Or KTY-84-130                                      |
| <b>INP3</b>       | input for voltgae measuerment max 35V                                       |
| <b>GND3</b>       | general gnd   |
| <b>INP4</b>       | input for sensor PT1000 or connected the same sensor in solar controller    |
| <b>INP5</b>       | Input for current measurement   |
| <b>GND4</b>       | Gnd for current measurement Or general if don't measurement current         |
| <b>INP6</b>       | Input for DS18B20 sensor ( 1-wire bus on RJ11 connector)                    |
| <b>INP3D</b>      | Logical input 3   |
| <b>INP4D</b>      | Logical input 4   |
| <b>GND5</b>       | gnd for INP4D and INP4D or general gnd                                      |

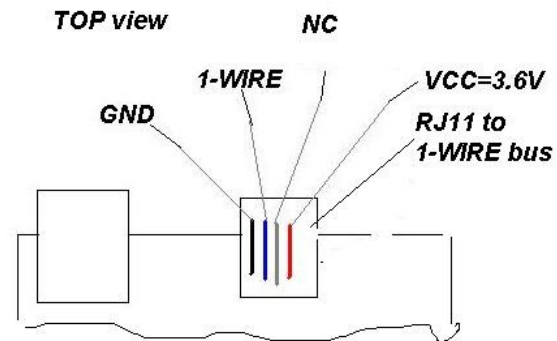
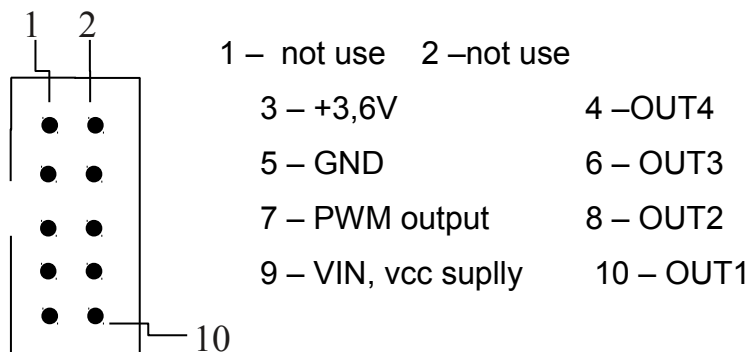
## Relay Bond:



NO – contact normally open  
CON – common contact  
NZ – contact normally closed

**ATTENTION:** In spite of that relay can switch AC voltage 255 VAC 10A, board fail to comply with safety requirements (lack housing, earthing). Therefore that receiver connect with the assistance safety external relays eg. on DIN bus, controlled by relay on board.

## IDC10 and RJ11



## RESET BUTTON

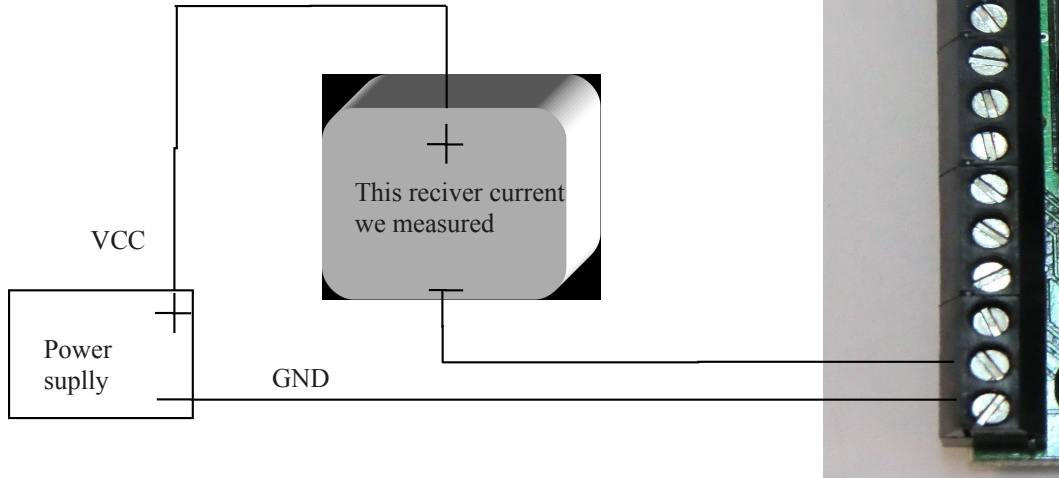
Push about 0,5 second cause change relay state on opposite, push and keep longer about 5 second (if we not logged by WWW on modul) cause modul reset, next if you still keep button about 10 second cause set all settings to default. Set all settings to default confirmation is fast switch relay on/off (klik-klik), don't wrong this with change relay state about 0,5s and switch relay off after restart.

User and password: admin

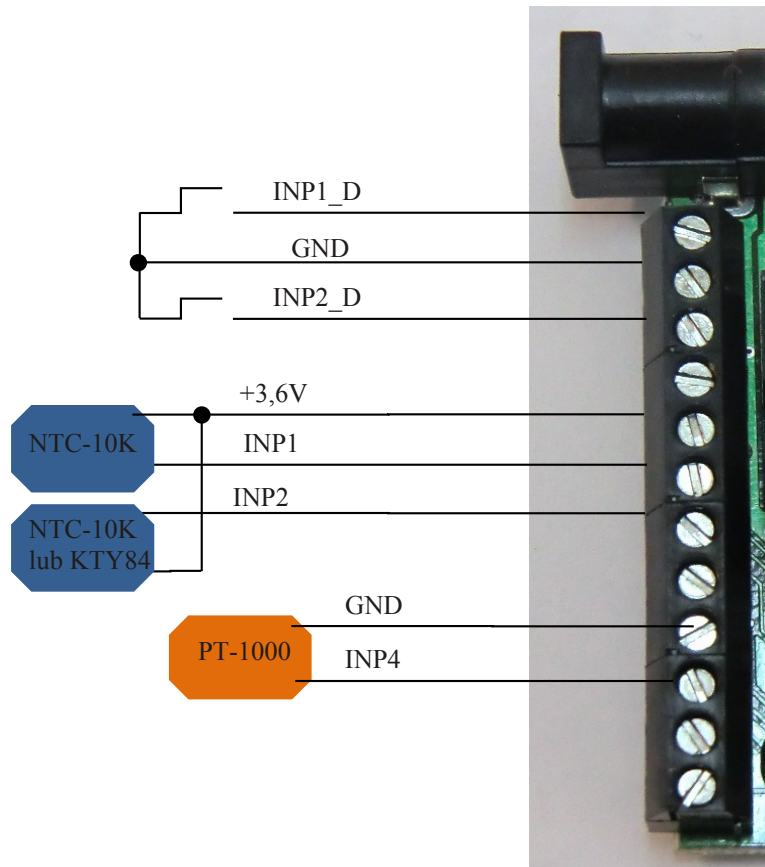
IP: 192.168.1.100

## Sensors connect

### 1. Current measurement.

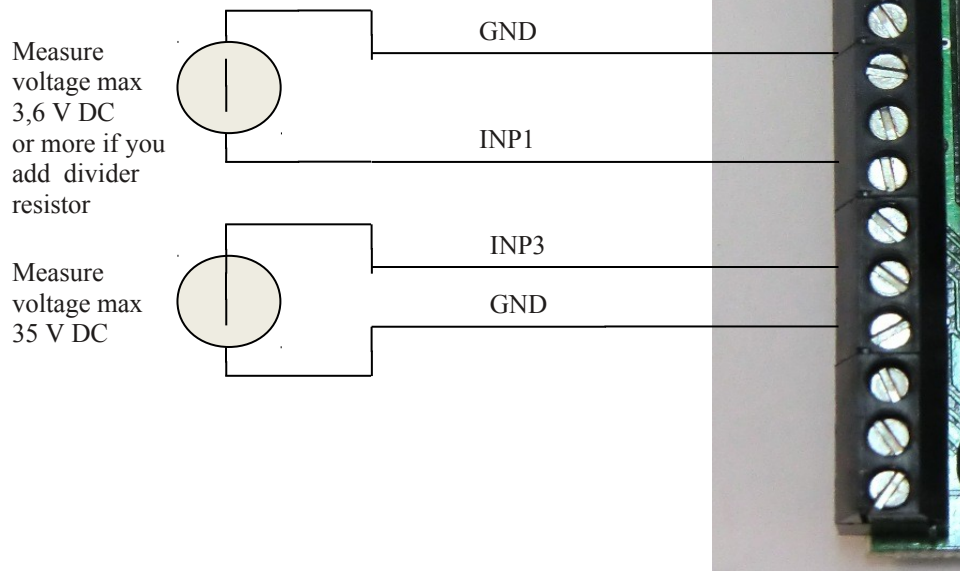


### 2. Temperature measurement and logical input.



### 3. Voltage measurement.

INP1 is use to temperature measure or voltage, in control panel you must choice what you want measure



#### Additional resistor to increase measure range INP1

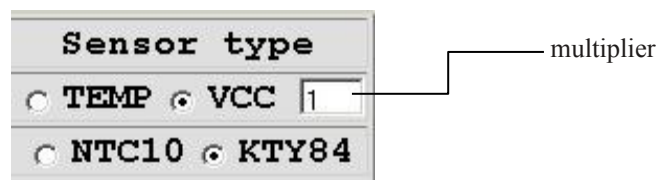


R = 10K increase range 2 (multiplier 2) that is  $3,6V \times 2 = 7,2V$

R= 20 K increase range 3 (multiplier 3)

R= 30 K increase range 4 (multiplier 4) etc.

Add resistor must be connected with set proper multiplier in field VCC on control panel page.





# Management by WWW.

## 1. Control Panel

Change outputs state display

Any text description, max 8 chars

Up Time:36sec, 6 min, 0 hour, 0 day .. 1970-01-01;02:06:36 LAN\_SWITCH-SENS/CONTROLLER

Control Panel Events Config WatchDog Scheduler Network Config HW:1.2 SW:2.40 S/N:4095

### CONTROL PANEL

VCC SUPPLY = 8.6 V Board Temperature= 25.9 °C

#### Digital Outputs Control

Reverse out state

Reset time  
0 0 0 0 0

| Out0 | Out1 | Out2 | Out3 | Out4 |

Out0 Out1 Out2 Out3 Out4

OFF OFF OFF OFF OFF

1 OFF 2 OFF 3 OFF 4 OFF 5 OFF

Set State

Auto switch Out  
 out0  out1  out2  out3  out4

65535 65535 65535 65535 65535

65535 65535 65535 65535 65535

**PWM Output OFF**

Frequency = 5008 Hz 5008

Duty = 50.0 % 50

Start

#### ANALOG Inputs State

| Input | Value | Unit | kal  | Sensor type  |
|-------|-------|------|------|--|
| Inp1  | N/A   | °C   | 0.0  | <input checked="" type="radio"/> TEMP <input type="radio"/> VCC 1  |
| Inp2  | N/A   | °C   | 0.0  | <input checked="" type="radio"/> NTC10 <input type="radio"/> KTY84 |
| Inp3  | 0.0   | V    | 0.0  |  |
| Inp4  | N/A   | °C   | 0.0  | PT1000   |
| Inp5  | 0.00  | A    | 0.00 |  |
| Inp6  | N/A   | °C   |      | DS18   |
| Inp7  | N/A   | °C   |      | DS18   |
| Inp8  | N/A   | °C   |      | DS18   |
| Inp9  | N/A   | °C   |      | DS18   |

Power measure

|       |       |    |  |  |
|-------|-------|----|--|--|
| I3*I5 | 0.00  | W  |  |  |
| P*t   | 0.000 | Wh |  |  |

Start Reset

#### DIGITAL Inputs State

| INP1D | INP2D | INP3D | INP4D |
|-------|-------|-------|-------|
| HIGH  | HIGH  | HIGH  | HIGH  |
| INPD  | INPD  | INPD  | INPD  |

Klik cause change relay state on opposite (OUT0 relay on board)

Set state All output simultaneously according to combo box

Run PWM generator

Value of calibration

Run Power measure from INP3 (voltage) and INP5 (current)

Chose type connected sensor

**Reset time** – for 0 normal outputs work (ON/OFF) , for time > 0 output after push button change state and return to state before after the specified time in seconds (max 65534).

**Automatic switching** outputs at a specific time (2 windows :1-time switch, 2-break time)

## 2.Events Config (events panel)

Delay of set outputs after occur events, in seconds max 65535

| Events Config   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| INPUTS  | OUTPUTS/ACTION  |   |   |   |   |   |   |   |   |
| HYSTERESIS  | OUT0  | OUT1  | OUT2  | OUT3  | OUT4  | PWM   | E-MAIL  | SNMP TRAP   |   |
| TEMP <input type="text" value="0.0"/><br><input type="checkbox"/>               | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/> Hz<br><input type="text" value="0.0"/> %   | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  |
| VCC SUPPLY <input type="text" value="0.0"/> <input checked="" type="checkbox"/> | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/> Hz<br><input type="text" value="0.0"/> %   | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  |
| INP1 °C <input type="text" value="0.0"/> <input checked="" type="checkbox"/>    | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/> Hz<br><input type="text" value="0.0"/> %   | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  |
| INP2 °C <input type="text" value="0.0"/> <input checked="" type="checkbox"/>    | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/> Hz<br><input type="text" value="0.0"/> %   | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  |
| INP3 V <input type="text" value="0.0"/> <input checked="" type="checkbox"/>     | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/> Hz<br><input type="text" value="0.0"/> %   | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  |
| INP4 °C <input type="text" value="0.0"/> <input checked="" type="checkbox"/>    | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/> Hz<br><input type="text" value="0.0"/> %   | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  |
| INP5 A <input type="text" value="0.00"/> <input type="checkbox"/>               | <input type="text" value="10.00"/><br><input type="text" value="0.00"/> | <input type="text" value="10.00"/><br><input type="text" value="0.00"/> | <input type="text" value="10.00"/><br><input type="text" value="0.00"/> | <input type="text" value="10.00"/><br><input type="text" value="0.00"/> | <input type="text" value="10.00"/><br><input type="text" value="0.00"/> | <input type="text" value="10.00"/><br><input type="text" value="0.00"/> Hz<br><input type="text" value="0.00"/> % | <input type="text" value="10.00"/><br><input type="text" value="0.00"/> | <input type="text" value="10.00"/><br><input type="text" value="0.00"/> | <input type="text" value="10.00"/><br><input type="text" value="0.00"/> |
| INP6 °C <input type="text" value="0.0"/> <input checked="" type="checkbox"/>    | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/> Hz<br><input type="text" value="0.0"/> %   | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  | <input type="text" value="100.0"/><br><input type="text" value="0.0"/>  |
| INP1 DIG <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/> <input type="text" value="0.00"/> Hz<br><input type="text" value="0.00"/> %              | <input type="text" value="text8"/>                                      | <input type="checkbox"/>  |   |
| INP2 DIG <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/> <input type="text" value="0.00"/> Hz<br><input type="text" value="0.00"/> %              | <input type="text" value="text9"/>                                      | <input type="checkbox"/>  |   |

Save Config

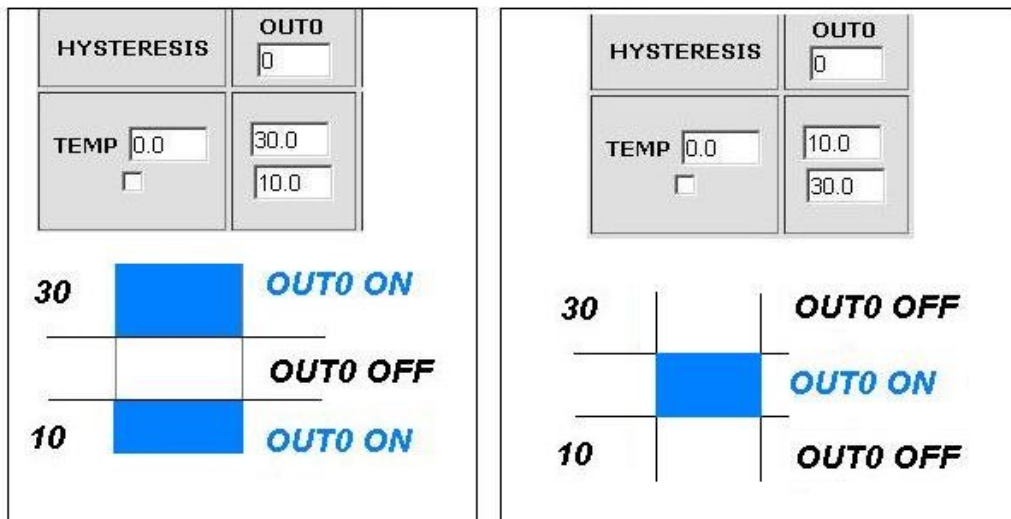
- Value of hysteresis
- ON/OFF input
- When signal cross up this value output will be set ON Or generator PWM start or send e\_mail or SNMP Trap
- When signal cross down this value output will be set ON Or generator PWM start or send e\_mail or SNMP Trap
- Save settings (ON/OFF input you don't must save)
- If check, means that is ON
- Email text that will be send if events occurrence, max amount char is 79. Chars „=” and „&” are not allowed

For logical input INP1D and INP2D, e-mail and SNMP Trap notification are send when input level change from 1 to 0 or 0 to 1, additional to email text (at end) will be add value 1 or 0 mark actual input state.



## Config events description:

Example:



## 3.Watchdog

### WatchDog

Enable IPO  
IPO 192.168.1.10    OUT0:  ON |  OFF |  RESET = 10 s | PING Failures 3  WD

Enable IP1  
IP1 192.168.1.10    OUT1:  ON |  OFF |  RESET = 10 s | PING Failures 3  WD

Enable IP2  
IP2 192.168.1.10    OUT2:  ON |  OFF |  RESET = 10 s | PING Failures 3  WD

Enable IP3  
IP3 192.168.1.10    OUT3:  ON |  OFF |  RESET = 10 s | PING Failures 3  WD

Enable IP4  
IP4 192.168.1.10    OUT4:  ON |  OFF |  RESET = 10 s | PING Failures 3  WD

20 s interval time - between next ping,  
30 s Wait time - before again ping, after event

Time to wait for respond is 4s

When check, watchdog will be automatically disabled and enabled when relay on/off by events set in "Events config"

When events occur, next ping to this same IPX will be send after this time (max 65535second)

Amount PING failures, after this one of three events will be happen:  
set (ON) output,  
set (OFF) output  
reset (ON/OFF) output on definite time (max 65535s).

Time to respond is 4 second, after this time one PING failures is counting. In time waiting to respond, another IPX aren't send ping, this may causa stretch time statment that another IPX address is inaccessible.

## 4.Scheduler

**Scheduler**

DATE and TIME:1970-01-01;02:01:10

---

|                                    |  |   |  |  |                              |
|------------------------------------|--|---|--|--|------------------------------|
| <input type="checkbox"/> Enable S0 | <input type="text" value="0,##,02:01:24"/> | <input type="radio"/> ON   <input checked="" type="radio"/> OFF | <input type="radio"/> RESET= <input type="text" value="10"/> | <input type="radio"/> Auto switch if INP1D | <input type="checkbox"/> 0/1 |
| <input type="checkbox"/> Enable S1 | <input type="text" value="0,Mo,00:00:00"/> | <input checked="" type="radio"/> ON   <input type="radio"/> OFF | <input type="radio"/> RESET= <input type="text" value="10"/> | <input type="radio"/> Auto switch if INP1D | <input type="checkbox"/> 0/1 |
| <input type="checkbox"/> Enable S2 | <input type="text" value="0,Mo,00:00:00"/> | <input checked="" type="radio"/> ON   <input type="radio"/> OFF | <input type="radio"/> RESET= <input type="text" value="10"/> | <input type="radio"/> Auto switch if INP1D | <input type="checkbox"/> 0/1 |
| <input type="checkbox"/> Enable S3 | <input type="text" value="0,Mo,00:00:00"/> | <input checked="" type="radio"/> ON   <input type="radio"/> OFF | <input type="radio"/> RESET= <input type="text" value="10"/> | <input type="radio"/> Auto switch if INP1D | <input type="checkbox"/> 0/1 |
| <input type="checkbox"/> Enable S4 | <input type="text" value="0,Mo,00:00:00"/> | <input checked="" type="radio"/> ON   <input type="radio"/> OFF | <input type="radio"/> RESET= <input type="text" value="10"/> | <input type="radio"/> Auto switch if INP1D | <input type="checkbox"/> 0/1 |
| <input type="checkbox"/> Enable S5 | <input type="text" value="0,Mo,00:00:00"/> | <input checked="" type="radio"/> ON   <input type="radio"/> OFF | <input type="radio"/> RESET= <input type="text" value="10"/> | <input type="radio"/> Auto switch if INP1D | <input type="checkbox"/> 0/1 |
| <input type="checkbox"/> Enable S6 | <input type="text" value="0,Mo,00:00:00"/> | <input checked="" type="radio"/> ON   <input type="radio"/> OFF | <input type="radio"/> RESET= <input type="text" value="10"/> | <input type="radio"/> Auto switch if INP1D | <input type="checkbox"/> 0/1 |
| <input type="checkbox"/> Enable S7 | <input type="text" value="0,Mo,00:00:00"/> | <input checked="" type="radio"/> ON   <input type="radio"/> OFF | <input type="radio"/> RESET= <input type="text" value="10"/> | <input type="radio"/> Auto switch if INP1D | <input type="checkbox"/> 0/1 |
| <input type="checkbox"/> Enable S8 | <input type="text" value="0,Mo,00:00:00"/> | <input checked="" type="radio"/> ON   <input type="radio"/> OFF | <input type="radio"/> RESET= <input type="text" value="10"/> | <input type="radio"/> Auto switch if INP1D | <input type="checkbox"/> 0/1 |
| <input type="checkbox"/> Enable S9 | <input type="text" value="0,Mo,00:00:00"/> | <input checked="" type="radio"/> ON   <input type="radio"/> OFF | <input type="radio"/> RESET= <input type="text" value="10"/> | <input type="radio"/> Auto switch if INP1D | <input type="checkbox"/> 0/1 |

Run auto switch out (switch times set in control panel) at specific time provided than INP1D is in a state that we set ( HIGH (1) or LOW(0))

### Week Day

Mo-Monday, Tu- Tuesday, We- Wednesday, Th- Thursday, Fi- Friday, Sa- Saturday, Su-Sunday, ## - all week day

Letter size is important

Format: number output(from 0 to 4),day1,day2,day3,day4,day5,day6, xx:xx:xx(time)

Example:

0,Mo,12:23:00 sets out0 every Monday at 12:23:00

1,Sa;Fi,Mo,23:22:03 sets out1 every Saturday, Friday and Monday at 23:22:03

1,Sa;Fi,Mo,Tu,Su,Th,23:22:03 sets out1 every Saturday, Friday, Monday, Tuesday, Sunday and Thursday at 23:22:03

0,##,12:01:30 - sets out0 every week day at 12:01:30

Reset – time in second (max 65535).

# Network Configuration.

## Network Configuration

### Email client settings

SMTP Server:  Port:

User Name:

Password:

To:

From:

Subject:

When you change setting press "Save Config" before Test

### Network settings

MAC Address:

Host Name:

Enable DHCP

IP Address:

Gateway:

Subnet Mask:

Primary DNS:

Secondary DNS:

### Remote Control

Enable

Server  Port:

Client  IP -  Port:

Password -

INP1D -  OUT0  OUT1  OUT2  OUT3  OUT4

INP2D -  OUT0  OUT1  OUT2  OUT3  OUT4

Working as a server (receiving packets and enable / disable the corresponding output) or client (send packets to the server after changing the state of the INP1D or INP2D). LK working as a server can be driven from any number of clients, provided it is set to the same password. Change INP2D INP1D or switches to a low output state selected "ON", the return to the high state output switches to "OFF".

### ACCESS settings

User:

Password:   
 Max char 8

---

### NTP settings

NTP Server:  Port:

Time Interval:

Time Zone:

---

### SNMP settings

Read Comm1:

Read Comm2:

Read Comm3:

Write Comm1:

Write Comm2:

Write Comm3:

TRAP Enable

Trap Reciver IP:

Trap Comm:

Time Interwal - minuts.

TRAP Enable – enabled send TRAP by SNMP.

### AUTO SEND TRAP settings

Enable Automatic Send TRAP

TEMP

VCC

INP1

INP2

INP3

INP4

INP5

INP1D

INP2D

Time Interval:  \* 10s = 0.17m

---

### Date and Time

NTP:

Set Manual:

---

### Relay after start

OUT0:  ON

OUT1:  ON

OUT2:  ON

OUT3:  ON

OUT4:  ON

Enable Automatic Send TRAP – enable automatic send TRAP by SNMP (above TRAP Enable must be enable)

Time Interval (max value 10555) – period to send TRAP from given INPUT, accuracy 10 s

Relay state after start

## **Reading XML data**

Enter the IP address and the page name eg 192.168.1.100/st0.xml

The values of the sensors should be divided by 10

Control Panel:

- dynamic data – st0.xml
- static data – st2.xml

Events Config : s.xml

Watchdog: w.xml

Scheduler: sch.xml

Network Config: board.xml

Up time: s\_time.xml with the Timezone

## **Switching outputs http request**

You can switch any outputs without clicking on the buttons in the control panel, making use of the following commands:

IP/outs.cgi?out=xxxxx – Switching outputs to the opposite of the current

IP/outs.cgi?outx=x – ON or OFF the output

when password authentication is enabled, the commands have this form:

user:password@IP/outs.cgi?out=xxxxx

user:password@IP/outs.cgi?outx=x

Example:

192.168.1.100/outs.cgi?out=0 – changes the out0 state to the opposite

192.168.1.100/outs.cgi?out=2 – changes the out2 state to the opposite

192.168.1.100/outs.cgi?out=02 – changes the out0 and out2 state to the opposite

192.168.1.100/outs.cgi?out=01234 – changes the out0,1,2,3,4 state to the opposite

192.168.1.100/outs.cgi?out0=0 – out0 ON

192.168.1.100/outs.cgi?out0=1 – out0 OFF

192.168.1.100/outs.cgi?out1=0 – out1 ON

192.168.1.100/outs.cgi?out1=1 – out1 OFF

192.168.1.100/outs.cgi?out4=0 – out4 ON

192.168.1.100/outs.cgi?out4=1 – out4 OFF



## **Firmware Upgrade.**

You may upgrade firmware on two ways:


1. By dedicated software „LAN Controller Tools”(find controller or put IP and click „Upgrade Firmware”).
2. By any TFTP client, description below.

Send firmware file by TFTP, you have 5 seconds (Green LED on RJ45 socket blink) to start sending firmware when the module runs after reset (you may reset by clicking the button „Save config and Reboot” in Network configuration or „Reset” button on board or dedicated software „LAN Controller Tools”). If the start transmission does not happen, the device starts working normally. If TFTP transmission will start, then wait about 90 seconds to finish uploading firmware. After uploading, the device will be reset and start normally.

If you want to upload the upgrade file, choose „Save config and Reboot” in Network configuration or power OFF and power ON the device .

**The file must be sent in binary mode** eg. In Windows XP tftp client

tftp -i 192.168.1.100 put „file\_upgrade.bin”.



```
C:\SYSWXP\system32\cmd.exe
C:\>tftp -i 192.168.1.100 put "firmware_lan_1.0.bin"
Przesłano pomyślnie: bajtów: 321664 w 79 ss, bajtów/s: 4071
C:\>_
```

## **OID dla SNMP**

|                       |                              |           |               |
|-----------------------|------------------------------|-----------|---------------|
| Soft_version          | .1.3.6.1.2.1.1.1.0           | READWRITE | ASCII_STRING  |
| SYS_OID               | .1.3.6.1.2.1.1.2.0           | READONLY  | OID           |
| SYS_UP_TIME           | .1.3.6.1.2.1.1.3.0           | READONLY  | TIME_TICKS.   |
| LAN_NAME              | .1.3.6.1.2.1.1.5.0           | READWRITE | ASCII_STRING. |
| TRAP_RECEIVER_ID      | .1.3.6.1.4.1.17095.2.1.1.1.1 | READWRITE | BYTE.         |
| TRAP_RECEIVER_ENABLED | .1.3.6.1.4.1.17095.2.1.1.2.1 | READWRITE | BYTE.         |
| TRAP_RECEIVER_IP      | .1.3.6.1.4.1.17095.2.1.1.3.1 | READWRITE | IP_ADDRESS.   |
| TRAP_COMMUNITY        | .1.3.6.1.4.1.17095.2.1.1.4.1 | READWRITE | ASCII_STRING. |
| OUT0 (5)              | .1.3.6.1.4.1.17095.3.1.0     | READWRITE | BYTE.         |
| OUT1 (6)              | .1.3.6.1.4.1.17095.3.2.0     | READWRITE | BYTE.         |
| OUT2 (7)              | .1.3.6.1.4.1.17095.3.3.0     | READWRITE | BYTE.         |
| OUT3 (8)              | .1.3.6.1.4.1.17095.3.4.0     | READWRITE | BYTE.         |
| OUT4 (9)              | .1.3.6.1.4.1.17095.3.5.0     | READWRITE | BYTE.         |
| TEMP (10)             | .1.3.6.1.4.1.17095.3.6.0     | READONLY  | ASCII_STRING. |
| VCC (11)              | .1.3.6.1.4.1.17095.3.7.0     | READONLY  | ASCII_STRING. |
| INP1 (12)             | .1.3.6.1.4.1.17095.3.8.0     | READONLY  | ASCII_STRING. |
| INP2 (13)             | .1.3.6.1.4.1.17095.3.9.0     | READONLY  | ASCII_STRING. |
| INP3 (14)             | .1.3.6.1.4.1.17095.3.10.0    | READONLY  | ASCII_STRING. |
| INP4 (15)             | .1.3.6.1.4.1.17095.3.11.0    | READONLY  | ASCII_STRING. |
| INP5 (16)             | .1.3.6.1.4.1.17095.3.12.0    | READONLY  | ASCII_STRING. |
| INP6 (17)             | .1.3.6.1.4.1.17095.3.13.0    | READONLY  | ASCII_STRING. |
| INP7 (18)             | .1.3.6.1.4.1.17095.3.14.0    | READONLY  | ASCII_STRING. |
| INP8 (19)             | .1.3.6.1.4.1.17095.3.15.0    | READONLY  | ASCII_STRING. |
| INP9 (20)             | .1.3.6.1.4.1.17095.3.16.0    | READONLY  | ASCII_STRING. |
| I3XI5 (21)            | .1.3.6.1.4.1.17095.3.17.0    | READONLY  | ASCII_STRING. |
| PXT (22)              | .1.3.6.1.4.1.17095.3.18.0    | READONLY  | ASCII_STRING. |
| INP1D (23)            | .1.3.6.1.4.1.17095.3.19.0    | READONLY  | BYTE.         |
| INP2D (24)            | .1.3.6.1.4.1.17095.3.20.0    | READONLY  | BYTE.         |
| INP3D (25)            | .1.3.6.1.4.1.17095.3.21.0    | READONLY  | BYTE.         |
| INP4D (26)            | .1.3.6.1.4.1.17095.3.22.0    | READONLY  | BYTE.         |