# Manual

## PDU SM-1688
## PDU SW-1081
## PDU SW-1681

# 1 Important Information

## 1.1 Introduction

Thank you for buying a Coba Nitrox PDU.

PDUs are intelligent power distribution units for computers in server racks. They are offering a couple additional features, depending on the model.

Please read the following instructions carefully.

## 1.2 Scope of delivery

1x PDU

1x Power cord

1x CD with manual in German and English

## 1.3 Symbols

| Symbol | Meaning |
|---|---|
|  | Dangerous situation which can result in violation or death. |
|   | Possible damage of property and other important information |

# 2 Safety

## 2.1 Intended use

HINWEIS

### 2.1.1 Environmental

This product is only for indoor use and for connection with computers.

Don´t use and store it inside humid rooms or near water.
Don´t use it close to source of heat. The additional heat could lead to overheating and fire.

### 2.1.2 Disposal

Please dispose your product by using the special discharge point for electronic waste. Please ask your municipality or disposal company in case of further questions.

## 2.2 General information

HINWEIS

Please read this manual carefully before installing or using this product.
Keep this manual and pass it when passing the product.
Please follow the instructions and warnings of this manual before using the product.
The inobservance of this manual can effect violations and damage.
We disclaim liability for violations and damages caused by inobservance of this manual.

## 2.3 Danger and protection

Don´t damage the cable.

Don´t pull the plug by pulling the cable.

Don´t use any patched or damaged cable or plug.

Don´t use the cable or product close to heat source.

Don´t open the housing of the product.

In case of strange noise or smell pull the power cord out of the socket.

Ensure that all cables are fixed permanently.

Keep the product away from children.

Don´t remove the cables with wet hands (electric strike).

Don´t use the product with wet hands (electric strike).

Keep the product free of dust (overheating and fire).

Leave service and cleaning only authorized and qualified personnel.

# 3 Product information

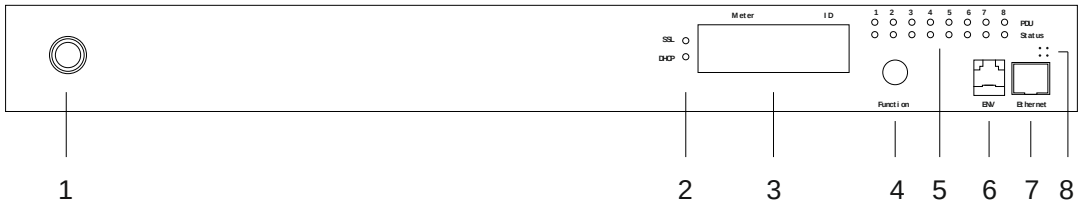
The PDU enables to power-on and –off the connected devices via a TCP/ IP network. Each of the output sockets can be switched separately. You can also read single or total power consumption as well as environmental parameters (with optional sensor), depending model.

## 3.1 Features

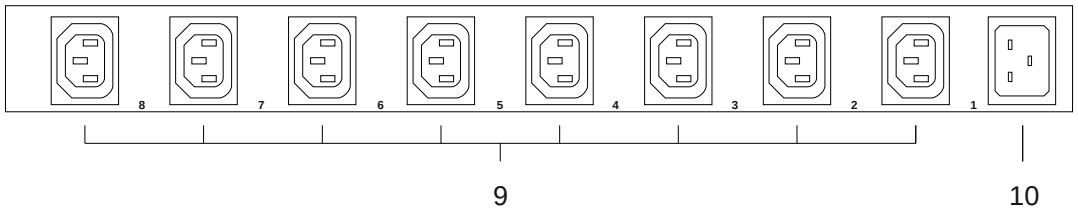
- Intergrated Web Server with Realtime Current Monitoring
- Integrated True RMS Current measurement
- Indicating IP Address
- Alarm by speaker
- Alarm by E-Mail and SNMP
- Supports PDU Monitor Software for monitoring several PDUs.
- Supports SNMP and MIB for monitoring by NMS
- Supports individual protection of sockets
- Realtime switching from output
- Status display by LED
- Supports switch-on delay
- Optional Temperature-/ Humidity sensor (only SM-1688)

## 3.2 Description

### SM-1688 Vorne




### SM-1688 Hinten




1 Fuse, Over Load Protection

2 LED DHCP: Indicates active DHCP

LED SSL: No function

3 Display Meter - Indicates Current and IP-Address

ID - PDU identification

4 Function button

Turn-Off Alarm (Over load alarm can´t be turned off)

Push and hold for 2 Sec. to show IP-Address

Push and hold for 4 Sec. for switch between DHCP and fixed IP

Push and hold for 6 Sec. for Reset

5 LED socket status

Green Connected device

Red Fault

6 Optional Sensor

7 Network

8 Speaker

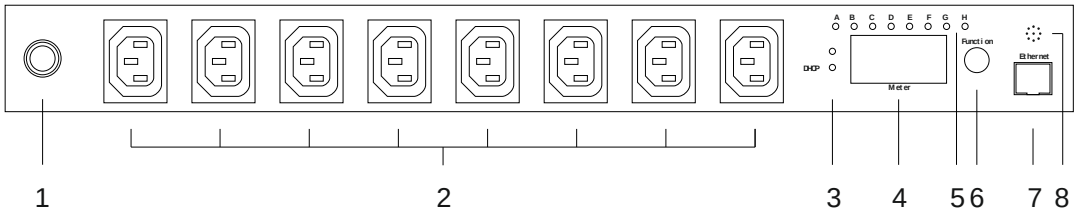
Warning - 1 tone / sec.

Over load - 3 tone / sec (The alarm will sound till the current is normal again and the real value is 0,5A lower than the critical value.)

9 Output

10 Input

**SW-1081/ 1681 Vorne**




**SW-1081/ 1681 Hinten**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7 Network

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Warning - 1 tone / sec.
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(The alarm will sound till the current is normal again and the real value is 0,5A lower than the critical value.)

9 Input

## 3.3 Technical data

| | |
|---|---|
| Sockets: | 1x Input 230V~ AC, 10A (IEC-60320 C13), 47-63 Hz (only model SW-1081) |
| | 1x Input 230V~ AC, 16A (IEC-60320 C20), 47-63 Hz (only model SM-1688/ SW-1681) |
| | 8x Output 230V~ AC, 10A (IEC-60320 C13) |
| | 1x Ethernet (RJ45) |
| | 1x Sensor (RJ11) (only model SM-1688) |
| Network: | 10 Mbit/s 10baseT Ethernet (RJ45) |
| Protocol: | TCP/IP, HTTP, DHCP, SNMP, Mail |
| Switched current (total): | 10A (2300W) only model SW-1081 |
| | 16A (3600W) only model SM-1681/ SW-1681 |
| Switched current (per port): | 10A (2300W) |
| Display: | 0-20A |
| Resolution: | 0,1A |
| Accuracy: | +/- 2% |
| Temperature: | 5°C - 45°C |
| Humidity: | 0% - 95% |
| Dimension: | 19" / 1 HU |
| Weight: | 1,5 kgs |

## 3.4 Electric connection

| | |
|---|---|
| Model SW-1081: | Power cord 10A |
| | Total current max. 10A (2300W) |
| Model SW-1681: | Power cord 10A |
| | Total current max. 16A (3600W) |
| Model SM-1688: | Power cord 16A |
| | Total current max. 16A (3600W) |

# 4 Installation

Temperature – When mounting inside a closed cabinet the temperature inside the cabinet can be higher than outside. Ensure that the temperature is within the specification mentioned in 3.3

Air Flow – Avoid to affect the air flow inside the rack.

1. Take out the PDU and check the package content for completeness and damages.

   In case of missing parts or external damages, please contact your local dealer for replacement.

   HINWEIS

   Please keep the original package for shipping in case of warranty issue.

2. Ensure to switch-off all devices before installing.

   HINWEIS

3. Fix the rack-brackets at the housing. Use the included screws.
4. Look for a suitable place in the rack and fix the PDU into the rack.
5. Connect all output cords. Then connect the input cord.
   Take care of the total current (look at 3.3/ 3.4).

6. Connect the PDU with the network.
7. The PDU is ready now.

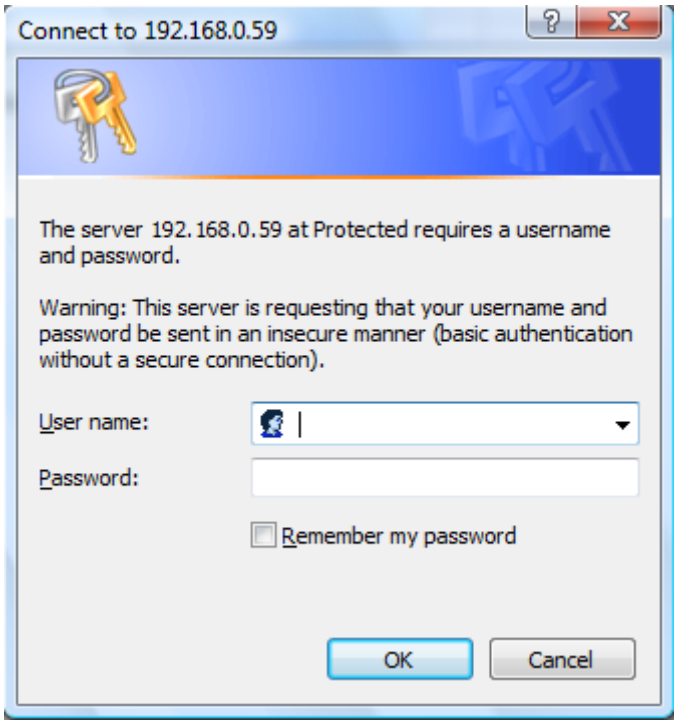
# 5 The Web interface

## 5.1 Login

Enter the IP address in a Web-Browser

The user name is „snmp“

The password is „1234“




## 5.2 Information - PDU

Displays the total current

If a sensor is connected (only SM-1688) also temperature and humidity will be shown.

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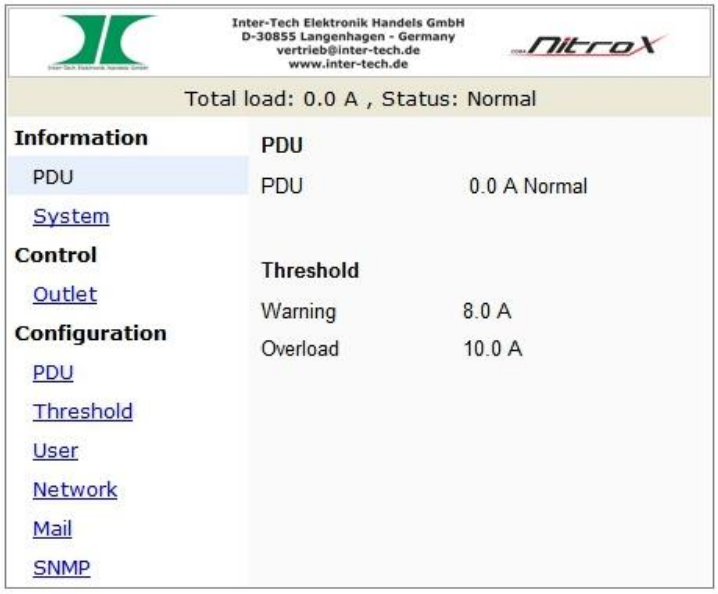
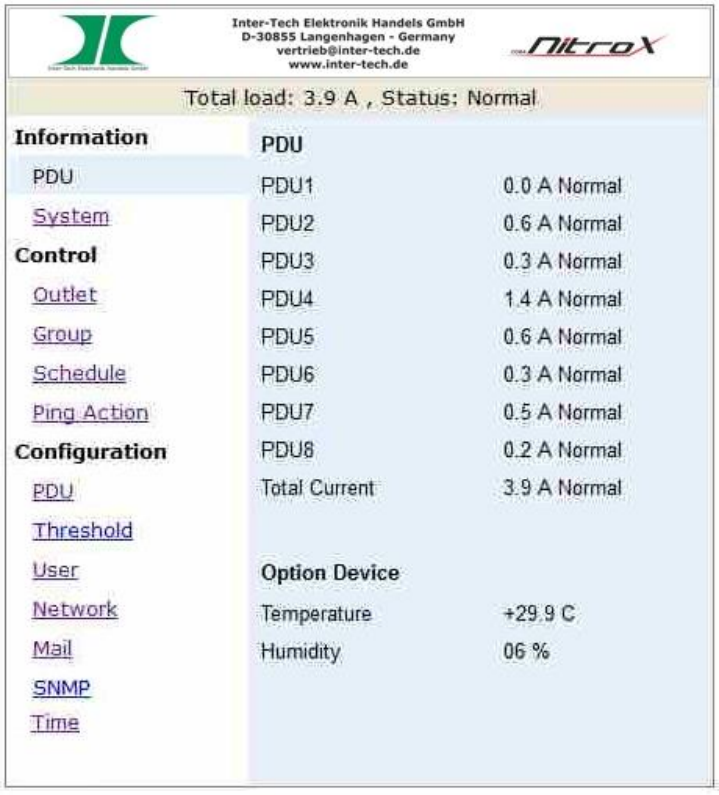



SM-1688



## 5.3 Information - System

Displays the system information like:

Model number

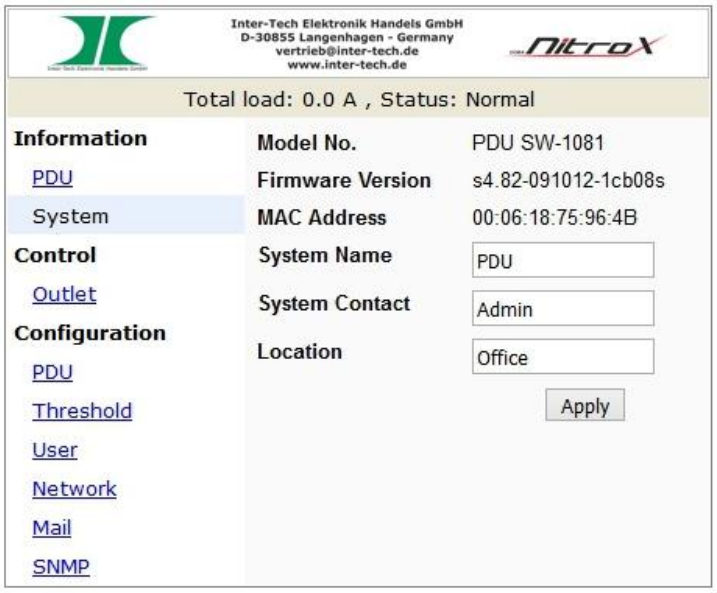
Firmware version

MAC address

System name

System contact

Location




## 5.4 Control - Outlet

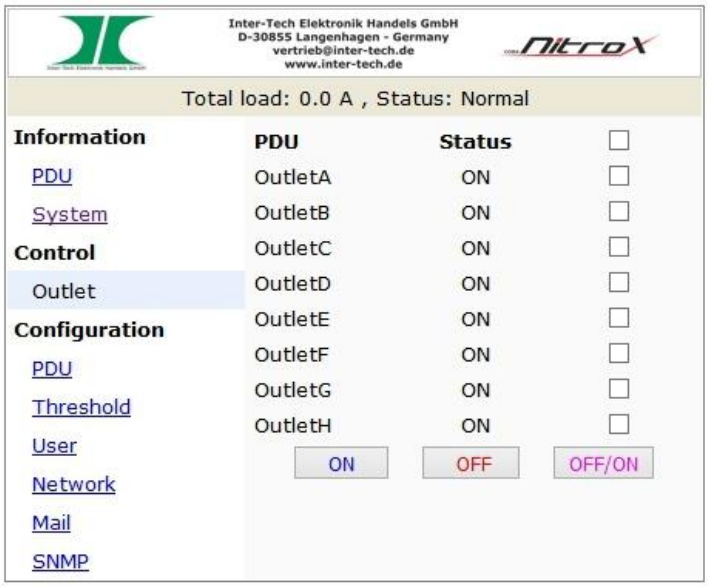
Displays status/ Change of socket status

Choose the right output and push the relevant button

**ON:** Push to Turn-On

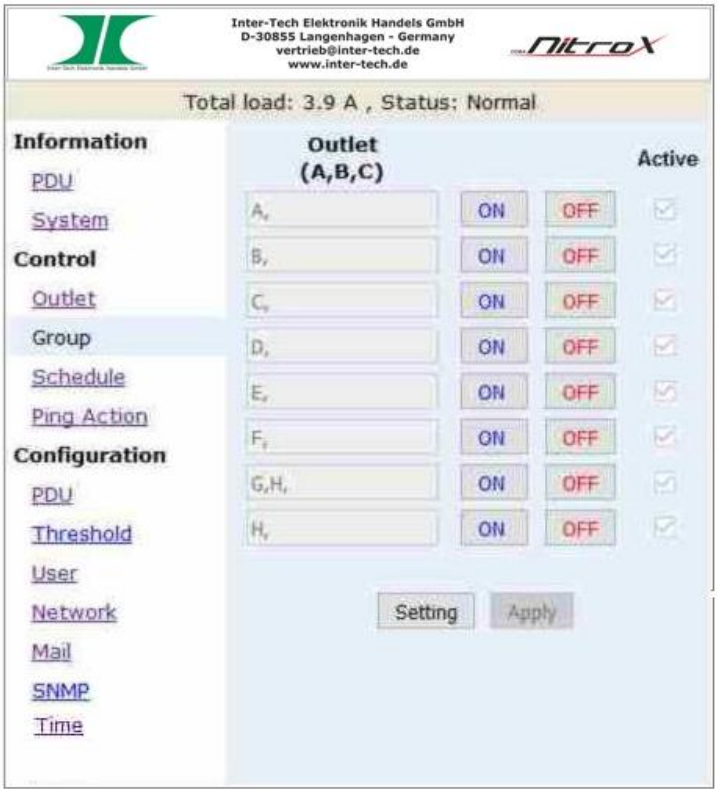
**OFF:** Push to Turn-Off

**OFF/ON:** Push for Reboot



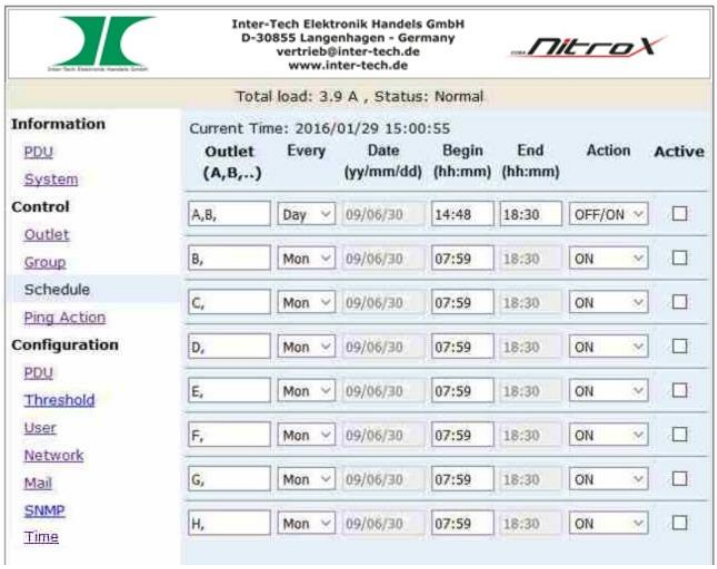

## 5.5 Control – Group (only SM-1688)

You can group different outputs to switch them together.
Register the outputs as named at Configuration-PDU and separate them by comma.



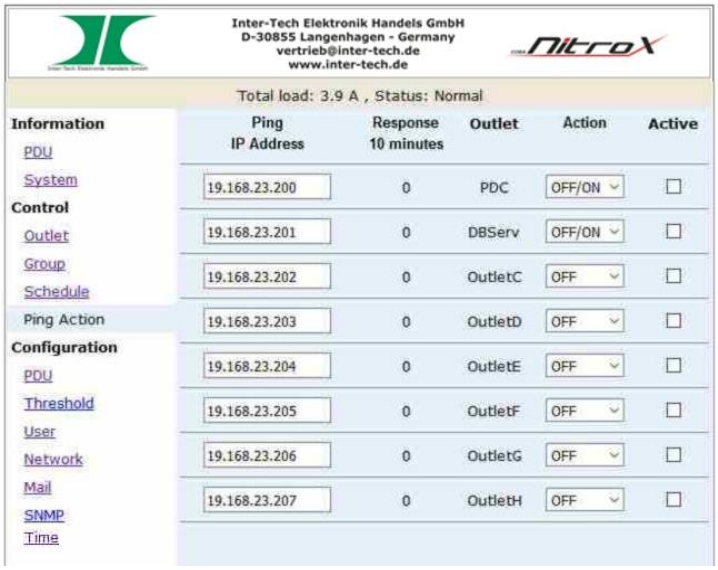
## 5.6 Control – Schedule (only SM-1688)

Adjust the time schedule for automatic On/ Off switch.
You can also adjust an Off-On Cycle




## 5.7 Control – Ping Action (only SM-1688)

Ping IP Address and start automatic switch if no response.



## 5.8 Configuration - PDU

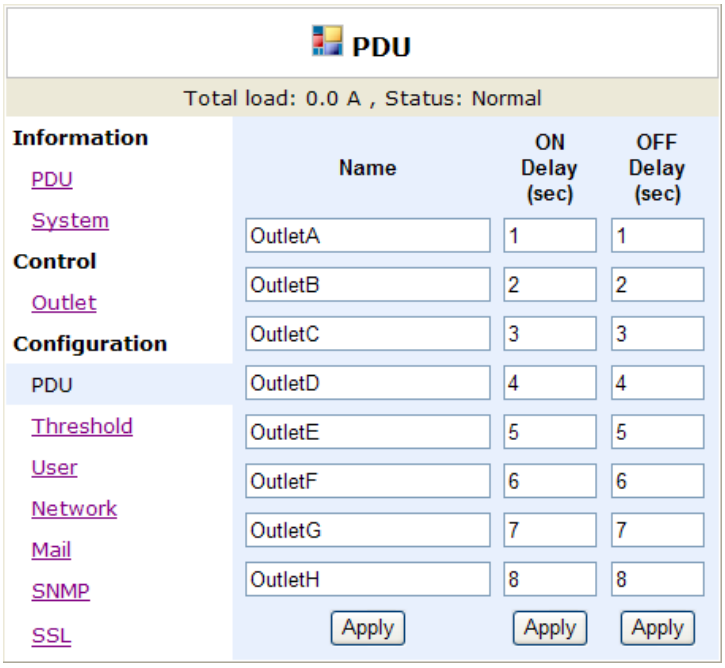
Nomination of output sockets and adjusting of Power-On delay.

**Name:** Name of output socket

**ON:** Adjusting of Power-On delay, per socket.

**OFF:** Adjusting of Power-Off delay, per socket.

Max. delay time is 255 sec.




**Consider：**

When the PDU is connected to the electric grid it will start the outputs automatically according the preset data. Factory setting will start each output with a delay of 1 second.

If the PDU will be disconnected before finishing all operations, it will recover the last status. Probably not started operations have to be started manually.

## 5.9 Configuration - Threshold

Adjusting Threshold for warning and over load

Only SM-1688: - Adjusting Treshold for temperature and humidity

- Adjustable per port

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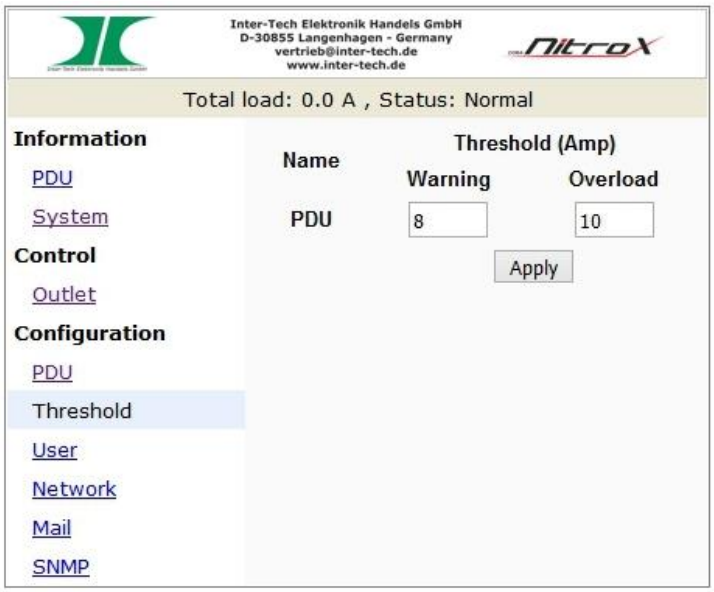
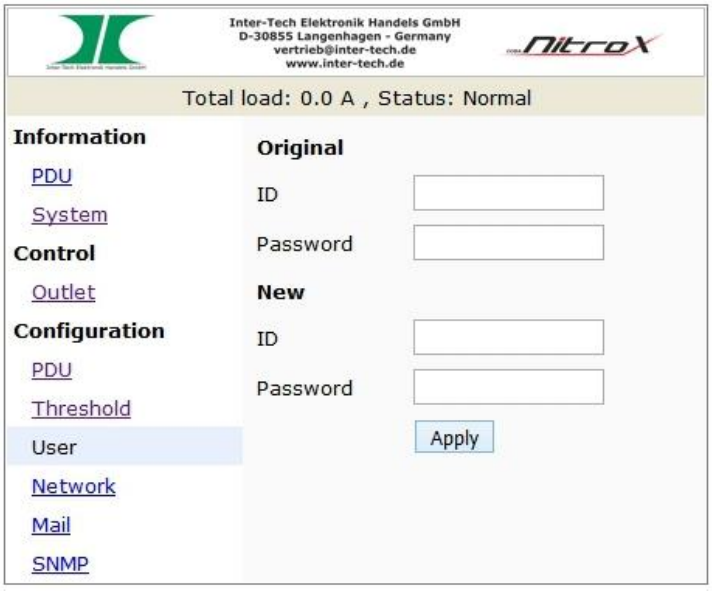


SM-1688


## 5.10 Configuration – User

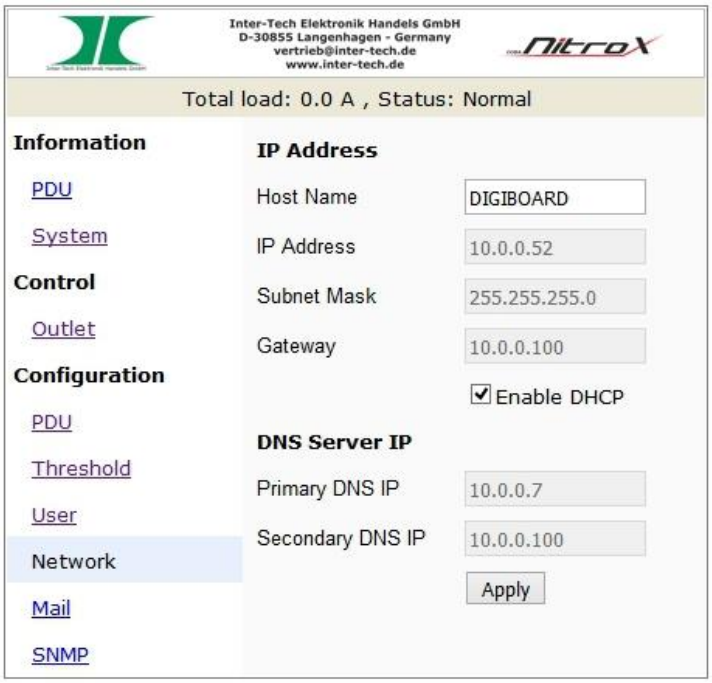
Change of ID and password

Default for ID is „snmp“ and for password “1234”



## 5.11 Configuration – Network

Network information




## 5.12 Configuration – Mail

Email Notification Setup for Alarm and Warning.

**Email Server:** Mail server name

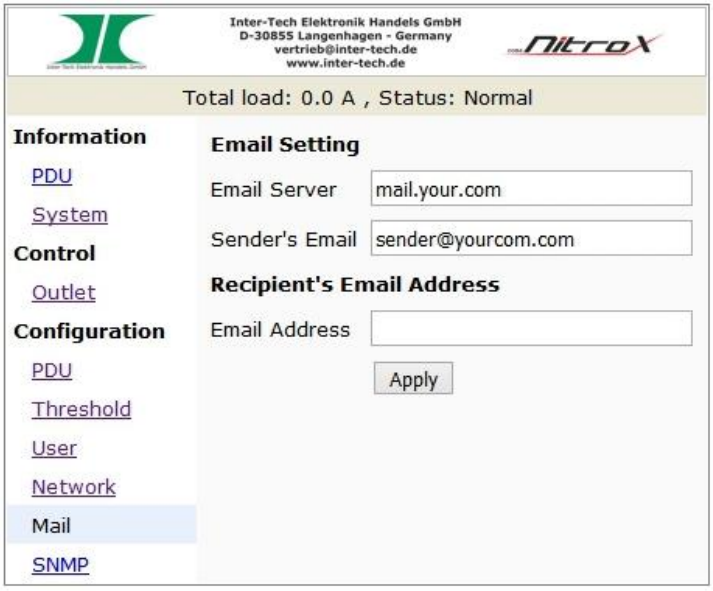
**Sender's Email:**

**Email Address:** Recipient email address

The email will contain the following information:

Output A-H XXXXXXXX

X=0 : Off
X=1 : On



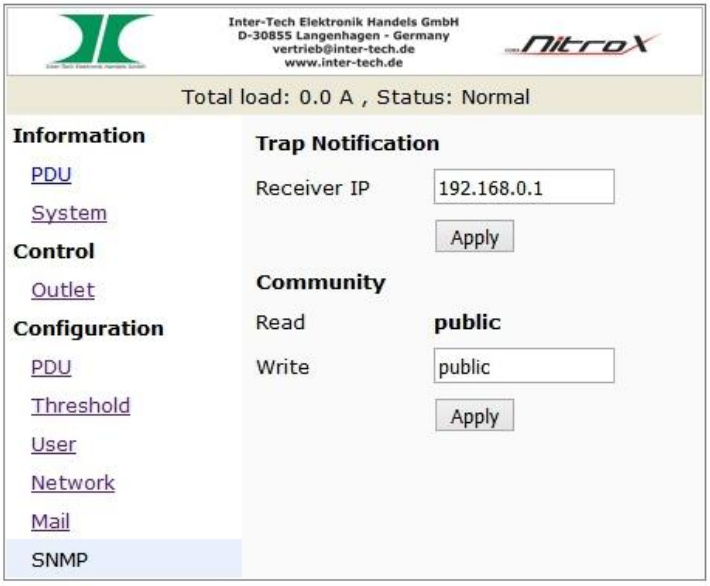

## 5.13 Configuration – SNMP

Email Notification Setup for Alarm and Warning by SNMP

**Trap Notification:** Recipient IP-Adresse

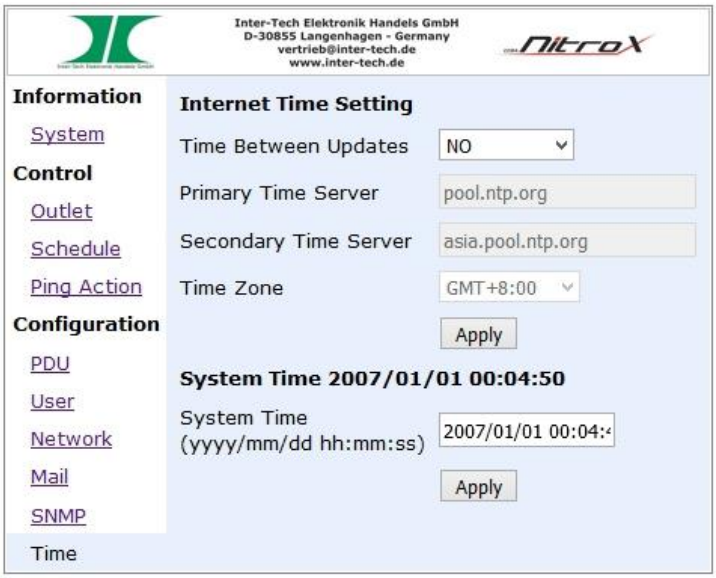
**Community:** Adjust SNMP area

Read: is fixed to “public”
Write: Default is “public”, can be changed individually.



## 5.14 Configuration – Time (only SM-1688)

Preset of time and time server




# 6 Using SNMP

The PDU is working with SNMP v1 and v2.

The attached CD includes the file PDUMIB.mib for import into your SNMP software in the folder MIB.

You can see all parameters when you open the file with a normal text editor.

Please look for further instructions into the manual of your SNMP software.

If you want to program scripts by yourself, please look into the specifications of SNMP.

# 7 Using PDU Utility

The PDU Utility software as well as the manual for that software is onto the attached CD.

# 8 Maintenance

This product needs no maintenance which requires an opening of the housing.

HINWEIS

You can remove dust outside with a dry duster.

Don´t clean the device with a damp cloth. Danger of an electric strike.

Check power cords from time to time.

Replace damaged power cords immediately.

# 9 Disposal

Please dispose your product by using the special discharge point for electronic waste. Please ask your municipality or disposal company in case of further questions.

# 10 Warranty terms

Inter-Tech grants 24 months warranty by proper use up from the date of purchase.

In case of warranty issue please contact your local dealer or the dealer from which you bought the product.

We will grant no warranty by:

- Missing or damaged warranty seal,
- Negligent behavior,
- Improper use,
- Nonobservance of the manual,
- External violence,
- Acts of god,
- Damages caused by manipulation, upgrading, updating or reconstruction of hardware or software
- Damages caused by other harm,

  In case of data loss Inter-Tech will only be liable at wanton negligence or deliberate intention or, in all other cases, only for the recovery of data from a continuous, daily backup. Inter-Tech does not assume liability for all other matters.

Please look also at our complete warranty terms on our website.

# 11 Contact

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