

ALIM TM5-II-IP réf : J-DA-016

BACKUP POWER CONNECTED





NT_ANEP_ALIM-TMS-II-IP_EN_24-05-2022

GENERAL WARNINGS

SAFETY INSTRUCTIONS

Pay close attention to the warnings contained in this section as they provide important guidelines for achieving a safe installation, for correct use and maintenance of the product.

- **ALIM TMS II-IP** is a DC backup power supply designed to be connected to the 230 Vac public distribution network.
- It ensures the continuity of equipment service in the event of a power outage.
 The emergency function is built into the product.
- An easily accessible two-pole disconnecting device must be provided and mounted upstream: curve C or D (recommended rating 1A).
- In order to avoid any risk of electric shock, any intervention must be carried out.
- The intervention must only be carried out by authorized personnel.
- Equipment intended for use in a technical room.
- · Horizontal or vertical mounting.
- Comply with thermal and mechanical limits.
- In the event of prolonged storage or disconnection, disconnect the battery mounted inside of the box.

WARNING

Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.



Electrical equipment must be compulsorily recycled according to Directive n°2012/19/EU of 04/07/12 relating to waste electrical equipment and Electronic (WEEE)

SUMMARY

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SPECIFICATIONS

ENVIRONMENTAL

Operating temperatures : 10°C...35°C

Storage temperatures : 0°C...85°C

Relative humidity in operation : 20% ...95% à 30°C

INPUT ELECTRICAL

- Network voltage 196 to 255 Vac Frequency: 50 Hz Class I
- Neutral systems: TT, TN, IT Primary current @ 230 Vac: 0.5 A
- Display by LED (green) of the presence of the network: Power

OUTPUT ELECTRICAL

• 2 outputs 12 Vcc (1,6 A total Max.)

BATTERY (Id. ANEP J-CA-062)

- Built-in lead battery 12 V, 3.4 A/h
- Local battery test using the battery test button: Test
- Display of the result of the battery test by an indicator: Battery OK

Pressing the button activates the battery test phase (flashing of the battery OK indicator). After one minute, if the indicator lights up, the battery is functional.

- MTBF (Main Time Between Failure) one charge/discharge per month: 10 years
- Self-discharge @ 25°C: 50% in 10 months
- Number of cycles: 1200 if the discharges do not exceed 30%



DESCRIPTION

ALIM TMS II-IP is a safeguarded and controlled DC power supply, intended for be connected to the 230 Vac public distribution network.

Main features :

- Ensures the continuity of equipment service in the event of a power outage.

- Permanently checks the presence of 230 Vac and the state of load of the battery and communicates the information via an IP network to a serverSyslog.

- Automatically retrieves the configuration from an ANEP server desired.
- Complies with EN60950 EN61000-3 EN61000-4 EN55014 standards.

DIMENSIONS









TABLETOP MOUNTING



Optional Rack Support (Id. ANEP : J-AA-001)



RACK MOUNTING

As an option, the support (**Id. ANEP: J-AA-001**) allows the TMS-II-IP PSU to be installed in a standard 19" inch wide computer rack, allow for a height of 2U.



WALL MOUNTING

As an option, the support (Id. ANEP : J-AA-001) allows wall installation



SUPPORT DIMENSION (Id. ANEP : J-AA-001)





CONNECTION

CABLES SUPPLIED

OUTPUT CABLE 12V, x3, 2M

Power plug 1.50m DC type ø5.5 x 2.5mm MALE



Power plug 1.50m DC type ø5.5 x 2.1mm MALE



Power plug 1.50m DC type ø5.5 x 2.1mm MALE



Please note that the equipment to be connected must be adapted to the following polarity

ETHERNET CABLE, CAT 5e, RJ45, 2m



MAINS CABLE 230V, 2m



CONNECTION

BATTERY

Open the door of the TMS-II-IP PSU to remove the battery. (see picture below) When connecting the battery, be careful not to invert the red terminal (+) and black (-).



Remarque : If the TMS-II-IP must be disconnected from the 230 Vac mains for a certain period of time (storage, maintenance, etc.), it is also necessary to disconnect the battery to avoid total discharge.

CONNECTION

FUSES

Before any intervention, please make sure to unplug the power cable230 Vac and the battery.



WORKING

FRONT FACE



IP-LEDs

| Color | State | Designation | |
|--------|---------------|--|--|
| Red | Fixed | Steady DHCP mode, no DHCP response | |
| | Slow Flashing | Long reboot, static mode, waiting for action | |
| | Fixed | Load config, DHCP mode, One425 | |
| Orange | Fast Flashing | Load config, DHCP mode, Standalone | |
| | Slow Flashing | Load configuration, static mode | |
| | Fixed | Ping serveur syslog, Transmission syslog ok | |
| Green | Fast Flashing | Config provisioning not recovered | |
| | Slow Flashing | Config provisioning recovered | |

LED Battery OK

| Off | | Battery out or missing, or fuse F2 out |
|-------|----------|---|
| Green | Flashing | Voltage <12Vdc, autonomy 1h not assured |
| Green | Fixed | Battery OK |

LED POWER

| Green | Off | No 230 Vac power supply | |
|-------|----------|---|--|
| Green | Flashing | Test in progress (see diagram "Battery TEST") | |
| Green | Fixed | Power ON | |

WORKING

TEST BUTTON (Diagram)

Pressing the button activates the battery test phase (flashing of the **LED Battery OK**). After one minute if the indicator lights up fixed, the battery is functional.



WORKING

RESET BUTTON

a. SHORT PRESS 1s (RESTART) :

- Simultaneous flashing Battery OK and Power (green LEDs) frequency 3Hz for 2s.
- Attempt of DHCP Mode for the automatic detection of an ONE425 router (Otherwise Static Mode enabled, IP Address, Mask and Default Gateway)

b. LONG PRESS 5s (FACTORY RESET):

- Slow flashing red IP LED.
- Loading the factory configuration.
- Password reset.
- IP Address, Mask and Default Gateway
- Wait for user action, see HTML administration page

OPERATING MODE

DHCP MODE WITH ONE425 ROUTER:

An ONE425 router connected to the TMS-II-IP ALIM takes on the role of DHCP server and Syslog and sends the following instructions at the start of communication with power supply.

- Option 2: Time offset (TimeOffset)
 Option 54: Server identifier (server identifier)
- **Option 58:** Renewal interval value (renewal time value)



OPERATING MODE

STAND-ALONE MODE (without ONE425 router)



- 1. On commissioning, the TMS-II-IP power supply connects to the ANEP server of provisioning to retrieve its configuration
- 2. Transmission of its status (power supply + battery) to the Syslog server

a. DHCP

The TMS-II-IP works with a dynamic IP address assigned by the server.

b. STATIC IP ADDRESS

The TMS-II-IP ALIM works with a fixed IP address defined either by the user either by default (factory).

PC CONNECTION

2 connection possibilities



HTML LOGIN

| ALIM-TMS II-IP | | |
|----------------|---------------------------------|--|
| | admin Password CONNECTION | |

Login: admin Password: admin (default)

Note : To reset the default password, see chapter "Reset button" (p.14)

HTML ADMIN PAGE

| ALIN | M-TMS II-IP |
|--|---------------------------------------|
| Version : s918R100F | |
| Mac address : XX-XX-XX-XX-XX-XX | |
| ✓ Static Mode | |
| Ip Address | 192.168.0.20 |
| Network Mask | 255.255.255.0 |
| Gateway | 192.168.0.254 |
| Manual DNS Primary DNS Secondary DNS | 8.8.8.8 |
| Syslog Server | |
| Ip Address | syslog.anepanywhere.com |
| Port | 514 |
| Cyclic send (1-3600 min) 5 | |
| Facility local0 | |
| Provisioning server | |
| Ip Address | https://provisioning.anepanywhere.com |
| Change password | Factory settings Save Undo |

FIELD DESCRIPTIONS:

IP addresses are in IPv4 format: xxx.xxx.xxx.xxx

STATIC MODE

If checked

- Static mode activated
- The IP address, Network mask and Gateway fields are active and editable

If unchecked (default)

- DHCP Mode Enabled
- The IP address, Network mask and Gateway fields are inactive

DNS

- Preferred DNS: Primary DNS server
- Alternate DNS: Secondary DNS server

SYSLOG SERVER

If checked

- Sending syslog frames to the customer's Syslog server or to the ONE425 router if it is connected
- The IP address, port and cyclic send fields are active and modifiable

If unchecked (default)

- No sending of syslog frames
- The IP address, port and cyclic send fields are inactive

Cyclic send (min.)

- Periodicity of sending Syslog frames
- Min value and max value = 1 Min and 3600 Max

Facilities

• Default: local0; (local0-local7)

PROVISIONING SERVER

If checked

- The configuration retrieved from the provisioning server contains the URL address of the Syslog server to which the ALIM TMS-II-IP must send Syslog frames
- · Get Provisioning button is active
- The IP address field is active and editable

If unchecked (default)

- No power-on configuration recovery action
- Get Provisioning button is grayed out and disabled

BUTTON DESCRIPTIONS :

CHANGE PASSWORD

Password change

1- Enter the current password

2- Entering the new password and confirming it

3- Click on **SAVE**: Save the new password, then return to the HTML administration page

4- Click on **UNDO**: Cancel the modifications, then return to the HTML administration page

GET PROVISIONING

Retrieving the config provided by the provisioning server

- 1- Force the recovery of the config
- 2- Display of the recovered config
- 3- Click on SAVE, to save and run the config
- 4- Click on UNDO, to cancel the modifications

FACTORY CONFIG

Display of the factory config (see next page)

- 1- Display of the factory config
- 2- Click on SAVE, to save and run the config
- 3- Click on **UNDO**, to cancel the modifications

SAVE

Saves and applies the values entered in the page

UNDO

Cancels the values entered in the page and displays the previous configuration

ADMINISTRATION HTML

FACTORY CONFIGURATION VALUES

Static Mode enabled

| IP address Network mask | : 192.168.0.20 : 255.255.255.0 |
|----------------------------|-----------------------------------|
| Gateway | : 192.168.0.254 |
| Primary DNS | : 8.8.8.8 |
| Secondary DNS | : 1.1.1.1 |

Syslog server enabled

| icionina corvo | r onablad | |
|----------------|---|--|
| Facility | : local0 by default ; (Min: local0 - Max: local7) | |
| Periodicity | : 10 (min) | |
| Port | : 514 by default ; (0-65565) | |
| IP address | : syslog.anepanywhere.com | |
| | | |

Provisioning server enabled

IP address : https://prov.anepanywhere.com/< version >/conf/<Mac addr>

IP-COMMUNICATION

LIST OF SYSLOG ALARMS

| | DESCRIPTION | | | |
|---|---|--|--|--|
| 1 | Test: TMS-II-IP test cannot be performed | | | |
| 2 | Test: TMS-II-IP test passed | | | |
| 3 | Test: TMS-II-IP test failed | | | |
| 4 | No 230 Vac power supply The TMS-II-IP PSU is now powered by the battery | | | |
| 5 | No 230 Vac power supply. The TMS-II-IP PSU is now powered by the battery but the battery level is insufficient | | | |
| 6 | The TMS-II-IP PSU is powered by the 230 Vac mains and the daily battery test is correct | | | |
| 7 | The TMS-II-IP PSU is powered by the 230 Vac mains and the daily battery test is "NO OK". The battery is either disconnected or needs to be replaced | | | |

TABLE OF STATES

| ALTERNATING CURRENT (AC) | BATTERY |
|--------------------------|--------------|
| ON | OK |
| ON | КО |
| OFF | UP (charged) |
| OFF | DOWN (low) |

IP-COMMUNICATION

PROVISIONING

On power-up, and if a One425 router is not connected to the TMS-II POWER SUPPLY IP, it tries to connect to a provisioning server.

The server recognizes the power supply by its Mac address and delivers the customer-specific configuration

The provisioning server hosts the configuration desired by the customer. If the client is not recognized, then a default configuration will be transmitted

The request is made on < version > https://prov.anepanywhere.com/< version >/conf/<Mac addr>

For example :

Mac adresse 12:34:56:78:90 https://prov.anepanywhere.com/v1/conf/12:34:56:78:90

Documentation : https://prov.anepanywhere.com/docs

The configuration file sent to the power supply is in JSON format

TROUBLESHOOTING / FAQs

| Condition | Causes | Solution |
|---------------------------|--|---|
| LED Power Management | Green off: No power supply 230 Vac power supply | Press the Test button to perform a bat- tery test to determine the battery status (flashing green). At the end of the test the LED should be solid green. |
| LED Battery Management | LED off: the battery is dead. | Disconnect one terminal from the battery and measure the voltage with a multimeter. |
| | Green flashing battery voltage is battery is below 12V | Disconnect the battery and charge it to 13V |
| LED IP Management | IP LED off | Check the network status and verify that the Ethernet cable is properly connected to the equipment. |
| | Orange IP LED steady | DHCP operating mode, the power sup- ply is wired to an Ekinops router. |
| | Orange IP LED flashing fast | DHCP operating mode, power is wired to another product. |
| | Orange IP LED flashing fast | Operating mode FIXED IP address, waiting to join the provisioning server. |
| | Green IP LED flashing slowly | Successful access to the provisioning server, attempted transmission to the Syslog server. |
| Powe Supply Management | The two fuses F2 and F6 battery and 12V output are not present or out of order | Replace and respect the indicated va- lues of the fuses. F2 : Radial 3.15A fast F6 : Radial 4A slow |
| | The F2 battery fuse is not present or out of order | The equipment works only on 230 Vac. Battery management not possible. Replace and respect the value of the value of the fuse. F2 : Radial 3.15A fast |
| | The fuse F6 output 12V is not present or out of order | The equipment works only on battery. Autonomy of 1 hour (depending on the battery charge level). Replace and respect the value of the value of the fuse. F6 : Radial 4A slow |

NOTES

ANEP applies a method of continuous development, therefore, ANEP reserves the right to make changes and improvements to any product described in this document, without notice.

ANEP cannot under any circumstances be held liable for any loss of data, as well as any particular damage or incident, resulting from poor implementation or noncompliant use of the product.

The contents of this document are provided "as is". No warranty of any form, express or implied, is made as to the accuracy, reliability, or content of the document. ANEP reserves the right to revise this document or withdraw it at any time without notice.

WARRANTY

This product is guaranteed for <u>**3 years**</u> from the date of invoicing of the product, with the exception of batteries and cells which are guaranteed for <u>**6 months**</u>.

However, this guarantee does not apply in the event of:

- Use that does not comply with the instructions in this manual.
- Deterioration from a cause external to the product (act of vandalism, fire, flood, storm, overvoltage...).
- Installation carried out by an unqualified installer not approved by ANEP.
- Modifications or repairs carried out by entities not approved by ANEP.
- Opening of the product by a non-ANEP approved person.



IMPORTANT

Particular care and rigor must be taken in the cabling and connection, in order to obtain the best sound results and optimal reliability of the product.

The equipment must be connected, installed and programmed according to the rules of the trade.





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<u>Website</u> : www.anepstore.com 4 bis rue de Paris 94470 Boissy-Saint-Léger

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