STATYS

Ethernet Connection

ENICOM Operating manual GB

socomec
Innovative Power Solutions UPS

INDEX

1. PRESENTATION

1. 1. Introduction

This document describes the configuration and the function of the Ethernet connection for STATYS range.
Functions available:

- MODBUS TCP
- SNMP agent
- E-mail
- Remote monitoring via embedded Web server

1. 2. Tools and software

The configuration is done via a PC running under WINDOWS. A specific tool (ENIFinder.exe) needs to be copied to the computer.
The PC should be connected to the same Network as STATYS. It's also possible to use an Ethernet cross and point to point cable, for commissioning.

1. 3. Network connection

The RJ45 connector is located on the front of STATYS's panel. For cabinet, it's necessary to open the door, to access on the connector.

2. IP ADDRESS CONFIGURATION

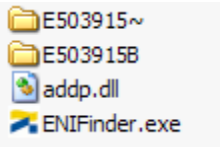
DHCP service is enabled as default configuration.

2. 1. ENIFINDER

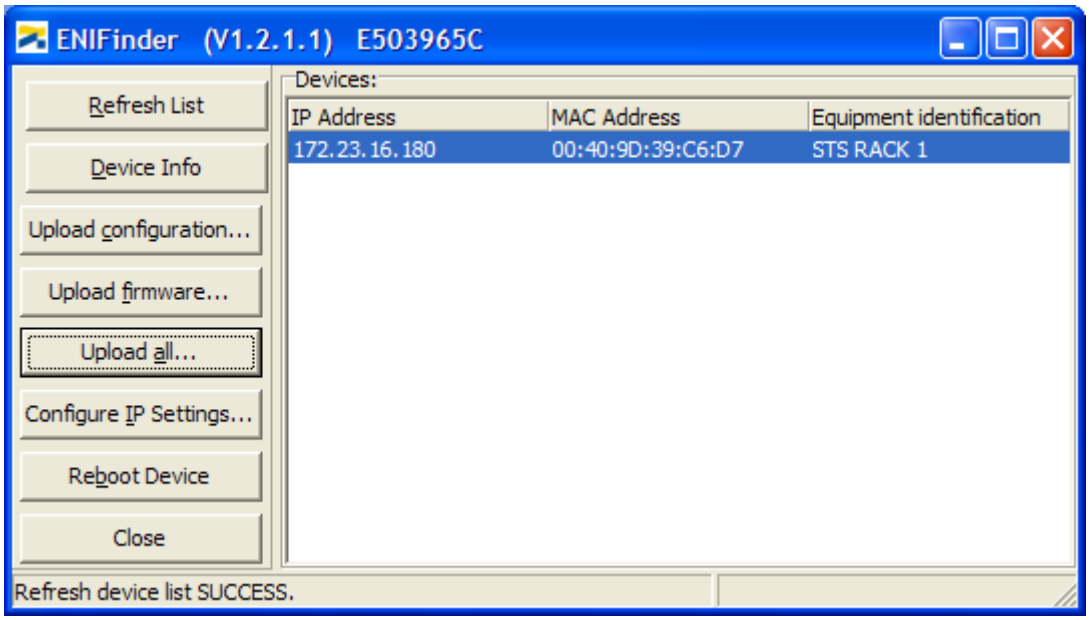
This tool is used to configure the TCP IP network parameters, to upload firmware, and configuration files. It detects automatically all STATYS connected on Network.

2. 2. ENIFINDER INSTALLATION

Copy the entire ENICOM directory on a local WINDOWS PC. Installation procedure is not needed.
Local ENICOM directory contains (example):



After running ENIFinder.exe program, the main window is displaying:



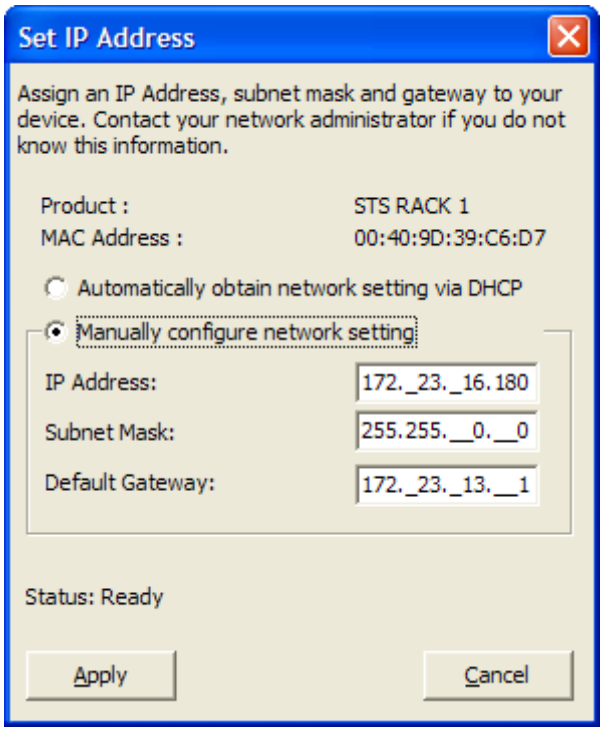
Example of a Statys Network

STATYS detected on the network are automatically displayed in the window.
Double-clicking a row opens the web page for the corresponding STATYS.

2. 3. IP SETTINGS

Select Configure IP Settings... to change network parameters.

Select DHCP or set fixed IP Address, mask and gateway if necessary.



Apply ENIFinder sends these new parameters, ENICOM reboots automatically.

=> wait for 1 minute

=> the list of connected STATYS will be updated with New parameters.

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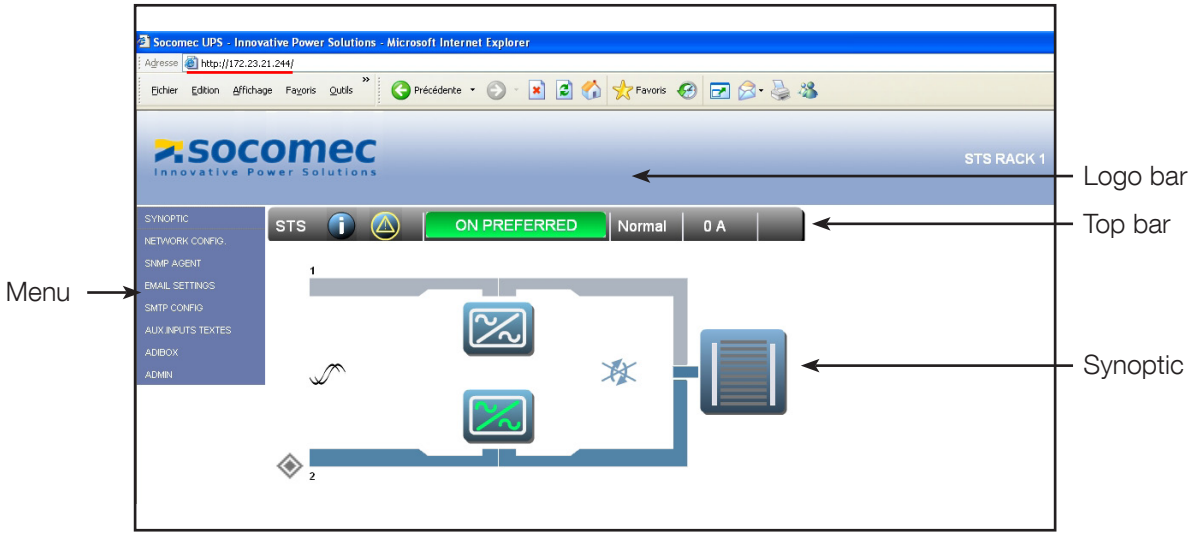
3. WEB PAGES

3. 1. Overview

The Statys interface is accessible via a web browser (Internet Explorer, Firefox) by informing the corresponding IP address



3. 2. Logo bar

Logo Socomec: link to the Socomec.com page

Statys Identification

3. 3. Top bar

Information Alarm Status bar Mode Output current

3. 3.1. Information

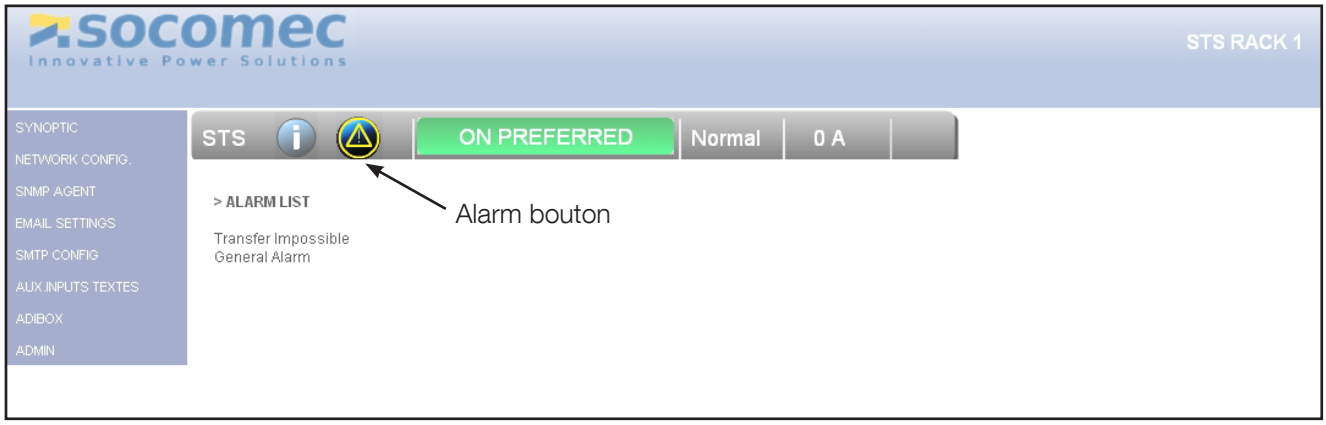
Give information about this Statys.

Exemple

> STS REFERENCE

Identification :	STS RACK 1
Description :	STATYS MONO
Serial Number :	0920348001
Nominal Amps :	63
SW Version :	E503915D 151209a

3. 3.2. Window alarms



The list is updated automatically every 10 seconds. It is available only if the button “alarm” is present.

3. 3.3. STATYS status bar

COLOUR	CONDITION
GREEN	on preferred source
YELLOW	on auxiliary source
	on bypass maintenance 1 or 2
RED	Load not supplied
	arrest imminent
GRAY	undefined

3. 3.4. Mode

MODE	DISPLAYED TEXTS
Normal	normal
Maintenance	Service

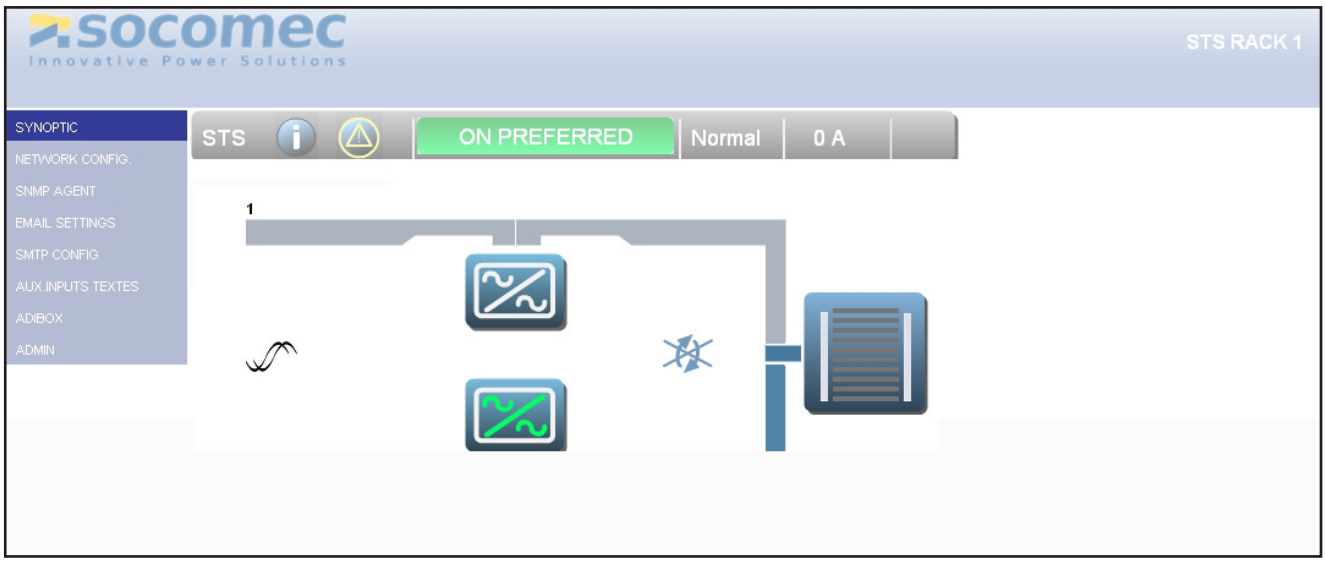
3. 3.5. Current supplied

Displays the output STATYS current measuring (Max of 3 phases).

3. 4. Menu

3. 5. Synoptic Menu

Back to the synoptic display.



3. 5.1. Animation of synoptic

SYMBOL	CONDITION
Priority Source 	Positioned next to the priority source (1 or 2)
Input 1 	Gray = no network Blue = network present
CS1 	White = not conducting Green = conducting Yellow = conducting and on fault
Output CS1 	Gray = CS1 not conducting Blue = CS1 conducting
Output 	Q3 closed and a CS lead
Load 	Indicates the loading rate: 120% - yellow 110% - yellow 100% .. 30%
Input 2 	Gray = no network Blue = network present
CS2 	White = not conducting Green = conducting Yellow = conducting and on fault
Output CS2 	Gray = CS2 not conducting Blue = CS2 conducting
	Impossible transfer
	Sources Synchronous
	Sources sliding
	On maintenance bypass (1 or 2)

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3. 5.2. Data Page

STATYS status page: active states and current measures

Accessible via the button “Status Bar” in the “Space Bar”

'S STATUS AND MEASUREMENTS

TES	**MEASUREMENTS**	
ce 1 Absent	Output voltage L1 (V)	231
erPath 1 OK	Output voltage L2 (V)	0
ce 2 OK	Output voltage L3 (V)	0
erPath 2 OK	Output voltage U12 (V)	0
perm. Not Synchron.	Output voltage U23 (V)	0
on Preferred Source	Output voltage U31 (V)	0
on S2	Output frequency (Hz)	49.9
ut OK	Output current I1 (A)	0
closed	Output current I2 (A)	0
closed	Output current I3 (A)	0
closed	Output current IN (A)	0
mode	Output load rate (%)	0
	Output Apparent P. L1 (kVA)	0
	Output Apparent P. L2 (kVA)	0
	Output Apparent P. L3 (kVA)	0
	Output load rate L1 (%)	0
	Output load rate L2 (%)	0
	Output load rate L3 (%)	0

CS 1 Page

Accessible by clicking on the symbol of CS1

> S1 STATUS AND MEASUREMENTS

STATES	**ALARMS**	**MEASUREMENTS**	
Source 1 Absent		S1 voltage L1N (V)	0
PowerPath 1 OK		S1 voltage L2N (V)	0
Srcs perm. Not Synchron.		S1 voltage L3N (V)	0
		S1 voltage U12 (V)	0
		S1 voltage U23 (V)	0
		S1 voltage U31 (V)	0
		S1 frequency (Hz)	0.0
		SS1 temperature (°C)	21
		S1-S2 phase shift (°)	0.0

CS 2 Page

Accessible by clicking on the symbol of CS2

> S2 STATUS AND MEASUREMENTS

STATES	**ALARMS**	**MEASUREMENTS**	
Source 2 OK		S2 voltage L1 (V)	230
PowerPath 2 OK		S2 voltage L2 (V)	0
Srcs perm. Not Synchron.		S2 voltage L3 (V)	0
Q42 closed		S2 voltage U12 (V)	0
SS2 closed		S2 voltage U23 (V)	0
		S2 voltage U31 (V)	0
		S2 frequency (Hz)	49.9
		SS2 temperature (°C)	21
		S1-S2 phase shift (°)	0.0

Output page

Accessible by clicking the exit of the STATYS 

> OUTPUT STATUS AND MEASUREMENTS

STATES	ALARMS	MEASUREMENTS	
Load on Preferred Source	Transfer Impossible	Output voltage L1 (V)	231
Load on S2		Output voltage L2 (V)	0
Output OK		Output voltage L3 (V)	0
Q30 closed		Output voltage U12 (V)	0
		Output voltage U23 (V)	0
		Output voltage U31 (V)	0
		Output frequency (Hz)	49.9
		Output current I1 (A)	0
		Output current I2 (A)	0
		Output current I3 (A)	0
		Output current IN (A)	0
		Output load rate (%)	0
		Output Apparent P. L1 (kVA)	0
		Output Apparent P. L2 (kVA)	0
		Output Apparent P. L3 (kVA)	0
		Output Power factor L1	0.00
		Output Power factor L2	0.00
		Output Power factor L3	0.00
		Output crest factor L1	0.0
		Output crest factor L2	0.0
		Output crest factor L3	0.0
		Output crest factor N	0.0
		Ambient temperature (°C)	32
		Output Active Power L1 (kW)	0
		Output Active Power L2 (kW)	0
		Output Active Power L3 (kW)	0
		Output load rate L1 (%)	0
		Output load rate L2 (%)	0
		Output load rate L3 (%)	0
		Output load rate N (%)	0

In the case of a STATYS phase, measurements of phases 2 and 3 are 0

3. 6. Network configuration Menu

3. 6.1. Password Protection

Default login: admin

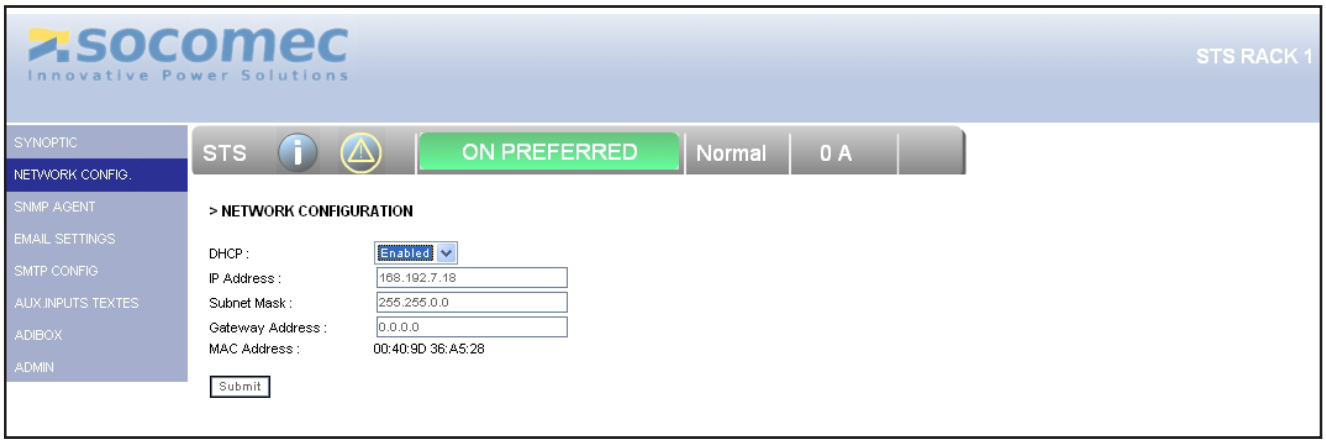
Password default: public

Each configuration page is protected by password
The password is stored throughout the session

3. 6.2. Network Configuration

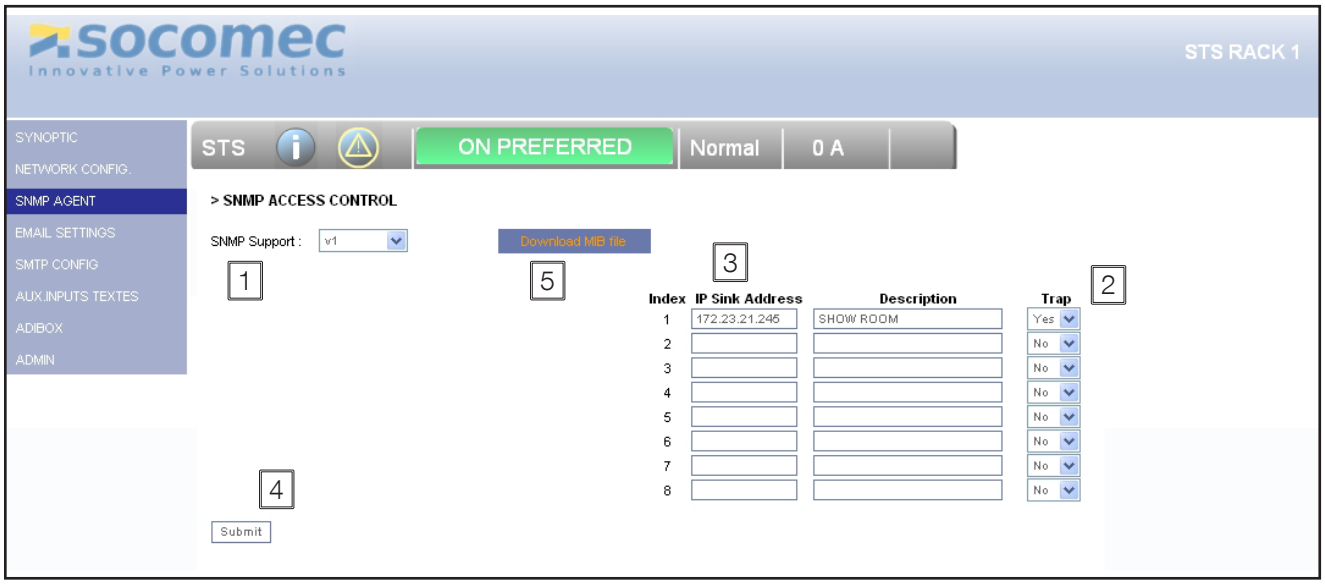
Used to activate the DHCP or assign a static IP

Click to Submit save the configuration



3. 7. SNMP MENU

3. 7.1. Configuration



1 Select version: V1 only

2 Enabling or disabling the function of TRAP: if the TRAP function is disabled, reading the OID via the GET function is activated

3 NMS IP Addresses: put the IP address of the NMS

Community

Public - read by default. No configuration possible

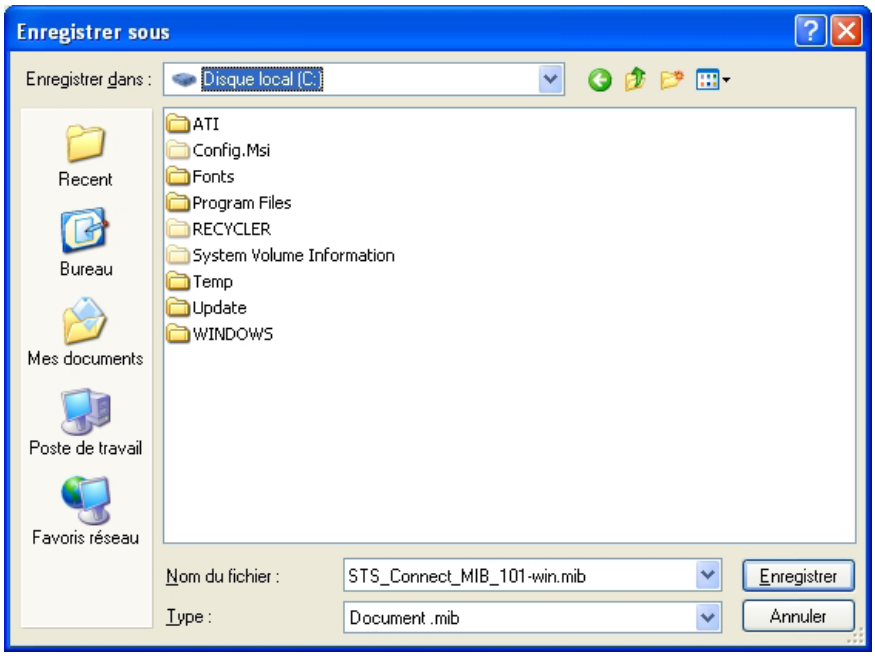
4

Save the settings by clicking: Submit

3. 7.2. MIB download

5

Click the button Download MIB file to reload the MIB file:



3. 7.3. List of OIDs of the MIB STATYS

STATYS Identification	STATYS INFORMATION (§ DATA BASE)
stsIdentModel	
stsIdentSerialNumber	
stsIdentFirmwareVersion	
stsIdentAgentSoftwareVersion	
STATYS Source 1	
stsSource1Status	
unknown(1),	
source1OK(2),	S000
source1Critical(3),	S001
source1OutTol(4),	S002
source1Absent(5)	S003
stsSource1Prefered	
no(1),	
yes(2)	S016
stsSource1Frequency	M006
stsSource1Voltage	M000 - M002
STATYS Source 2	
stsSource2Status	
unknown(1),	
source2OK(2),	S006
source2Critical(3),	S007
source2OutTol(4),	S008
source2Absent(5)	S009
stsSource2Prefered	
no(1),	
yes(2)	!S016
stsSource2Frequency	M014
stsSource2Voltage	M008 - M009 - M010
STATYS Sources Interaction	
stsSourcesInteraction	
unknown(1),	
synchron(2),	S012
sliding(3),	S013
asychron(4)	S014

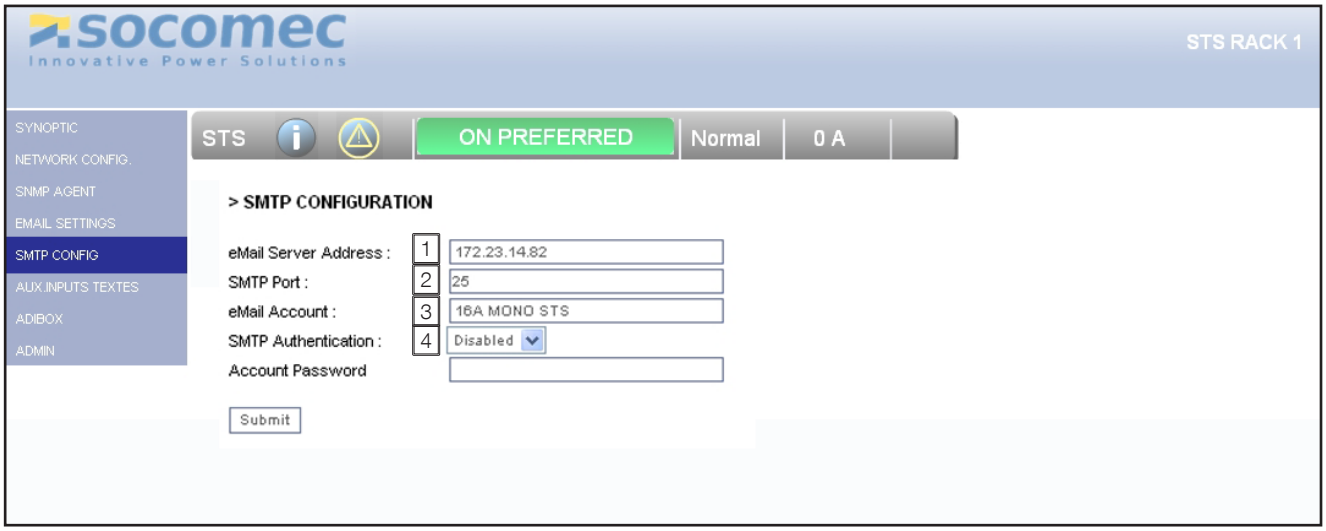
STATYS Output			
stsOutputLoadStatus			
unknown(1),			
outputLoadOnPreferredSource(2),			S017
outputLoadOnAlternateSource(3),			S018
outputLoadOFF(4),			S019
outputLoadOnMBP1(5),			S020
outputLoadOnMBP2(6)			S021
stsOutputStatus			
unknown(1),			
outputOnSwitch1(2),			S023
outputOnSwitch2(3),			S024
outputOFF(4)			!S023 & !S024
stsOutputFrequency			M022
stsOutputLoadRate			M029
stsOutputVoltage			M016 - M017 - M018
stsOutputCurrent			M024 - M025 - M026
stsOutputkVA			M032 - M033 - M034
stsOutputkW			M048 - M049 - M050
stsOutputCrestFactor			M040 - M041 - M042
stsOutputPowerFactor			M035 - M036 - M037
STATYS Alarms / Alerts			
stsImminentStop	no (1)	yes (2)	A000
stsTransferImpossible	no (1)	yes (2)	A007
stsConsecutiveDetection	no (1)	yes (2)	A005
stsOverload	no (1)	yes (2)	A003
stsString1Alarm	no (1)	yes (2)	A011
stsString2Alarm	no (1)	yes (2)	A015
stsPreventiveMaintenance	no (1)	yes (2)	S046
stsGeneralAlarm	no (1)	yes (2)	A031
stsCustomInputAlarm	no (1)	yes (2)	A029

3. 7.4. SNMP TRAPS (TRAPS management)

LISTE DES TRAPS	**STATYS INFORMATION (§ DATA BASE)**
stsTrapImminentStop	A000
stsTrapOverload	A003
stsTrapSwitchOnPreferedSource	S017
stsTrapSwitchOnAlternateSource	S018
stsTrapSource1PreferredSource	S016
stsTrapOutputLoadOFF	S019
stsTrapGeneralAlarm	A031
NormalSituation	

3. 8. SMTP Configuration Menu

The e-mails are only sent if the SMTP server has been configured in advance.



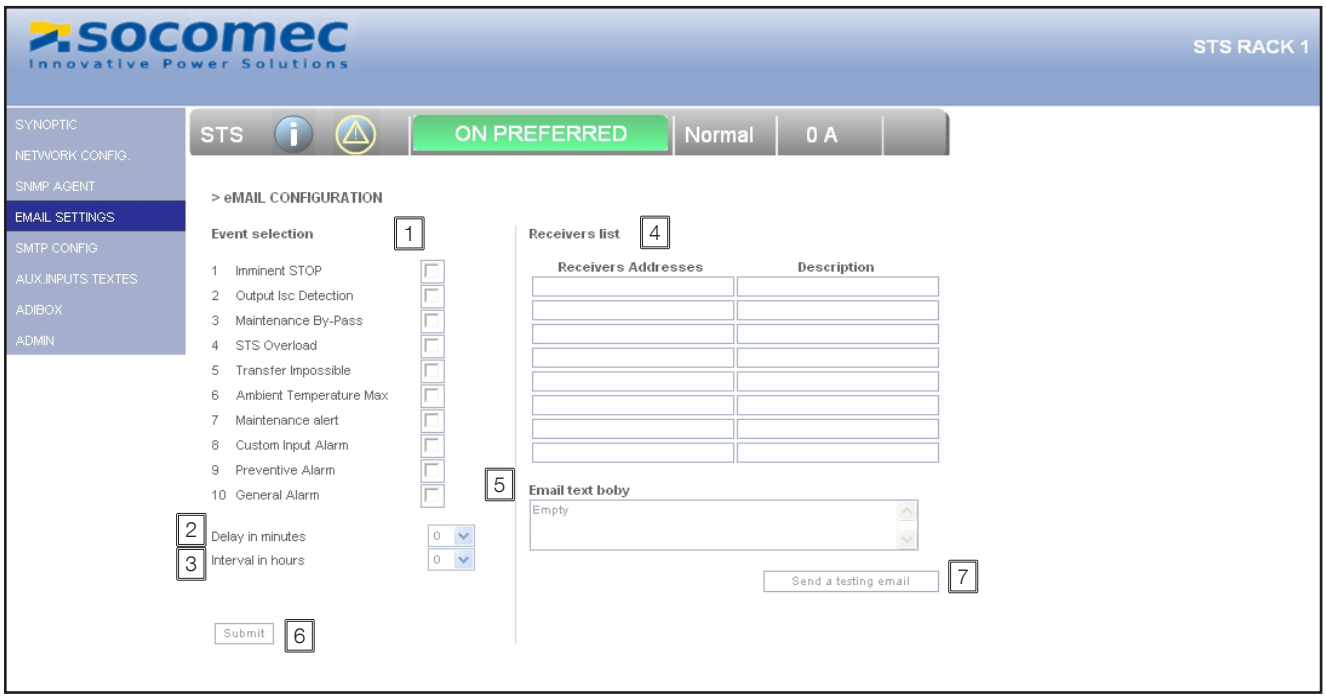
1 The IP address of mail server

2 Port number to 25 by default (modifiable)

3 Identifies the sender of the mail

4 Required based on the mail server used

3. 9. EMAIL CONFIGURATION MENU



1 Selected events will trigger the sending of mail.

2 Tempo in which events must be active to generate the sending of email.

3 Interval in hours of rehearsal for sending email if the event or events are always enabled

4 Up to 8 addresses. (field description is given only by way of info, it is not transmitted with the message)

5 Free text (in the body of the message)

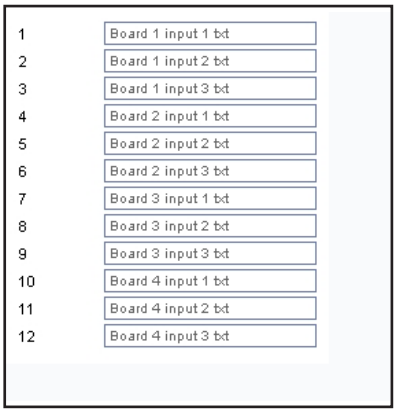
6 Save the configuration by clicking Submit

7 Sending a test email

Configuration must be saved the before you can send a test email

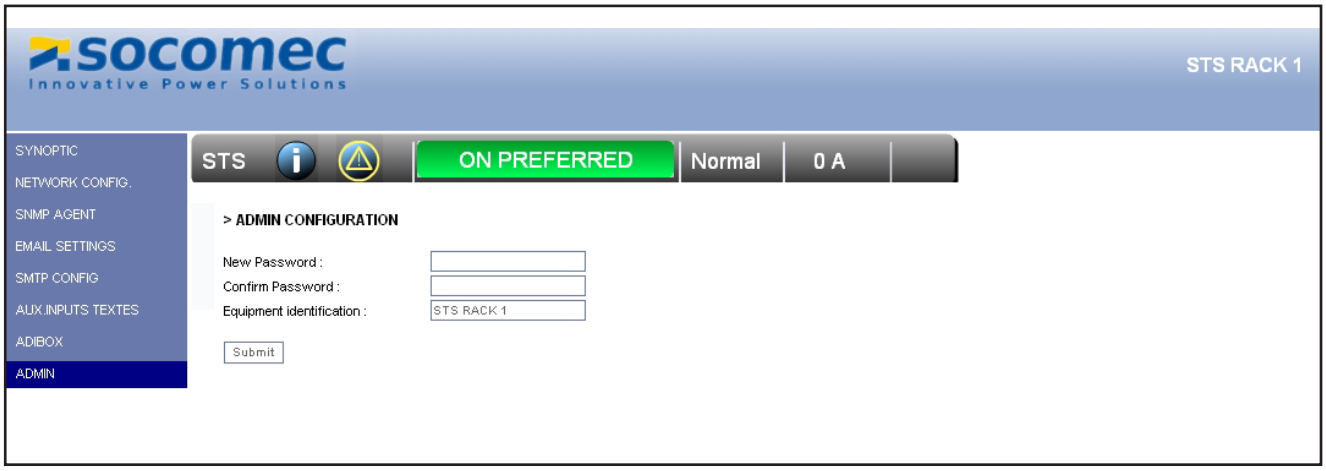
3. 10. TEXTS INPUT MENU

This feature is only available if the graphics screen is present on STATYS.
It allows assigning texts to the auxiliary input if the cards I/O (ADC) are installed



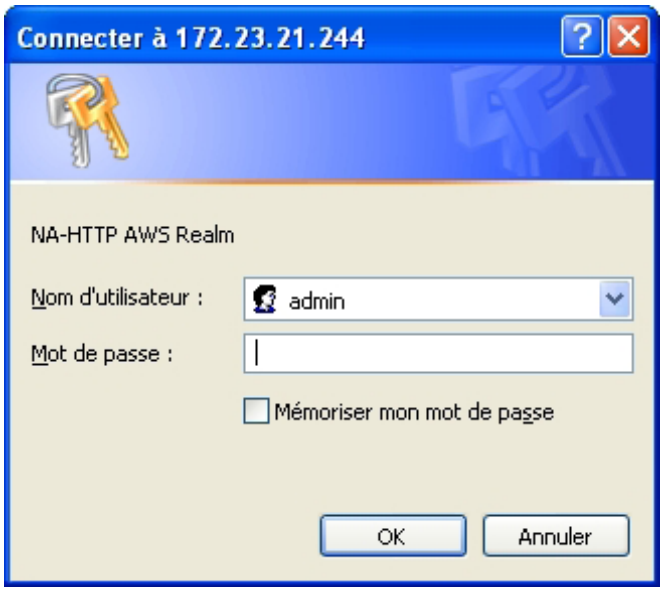
3. 11. Admin Menu

3. 11.1. Managing password



Allows you to change the password to access the configuration pages (“public” by default):

The password is requested for all pages of configurations:



4. STATYS DATA BASE

Accessibles via Modbus TCP ou RTU (RS485)

4. 1. STATE : ADDRESS MODBUS 0x0140 - 3 WORDS

S000 Source 1 OK
S001 Source 1 critical
S002 Source 1 out of tolerance
S003 Source 1 absent
S004 PowerPath 1 OK
S005
S006 Source 2 OK
S007 Source 2 critical
S008 Source 2 out of tolerance
S009 Source 2 absent
S010 PowerPath 2 OK
S011
S012 Srcs perm. Synchronised
S013 Sliding Sources
S014 Srcs perm. Not Synchron.
S015 Srcs Instant. Synchron.

S016 S1 is preferred source
S017 Load on preferred source
S018 Load on auxiliary source
S019 Load not supplied
S020 Load on manual by-pass1
S021 Load on manual by-pass2
S022
S023 Load on S1
S024 Load on S2
S025
S026 Transfer locked ext.
S027
S028 Output OK
S029 Output out of tolerance
S030 Output absent
S031

S032 ESD input active
S033 Q41 closed
S034 Q42 closed
S035 SS1 closed
S036 SS2 closed
S037 Q30 closed
S038 Q51 closed
S039 Q52 closed
S040
S041 Access profile 1
S042 Access profile 2
S043
S044
S045 Remote controls enabled
S046 Maintenance alert
S047 User mode

4. 2. ALARM : ADDRESS MODBUS 0x0148 - 2 WORDS

A000 Imminent stop
A001 Output Isc detection
A002 Manual By-Pass
A003 Overload
A004
A005 Consecutive Detections
A006 Switchback impossible
A007 Transfer impossible
A008
A009 PowerPath1 deteriorated
A010 PowerPath1 short circuit
A011 PowerPath1 in failure
A012
A013 PowerPath2 deteriorated
A014 PowerPath2 short circuit
A015 PowerPath2 in failure

A016 Backfeed1 protection open
A017 Backfeed2 protection open
A018 Ambient temperature max
A019
A020 Insufficient resources
A021
A022
A023
A024
A025 Preventive alarm
A026 Configurartion Alarm
A027 HMI Alarm
A028 Electronics
A029 Custom input alarm
A030 Maintenance Alalrm
A031 General Alarm

4. 3. MEASUREMENT - ADDRESS MODBUS 0x0220 - 64 WORDS

M000	S1 voltage L1N	(V)
M001	S1 voltage L2N	(V)
M002	S1 voltage L3N	(V)
M003	S1 voltage U12	(V)
M004	S1 voltage U23	(V)
M005	S1 voltage U31	(V)
M006	S1 frequency	(Hz)
M007		
M008	S2 voltage L1	(V)
M009	S2 voltage L2	(V)
M010	S2 voltage L3	(V)
M011	S2 voltage U12	(V)
M012	S2 voltage U23	(V)
M013	S2 voltage U31	(V)
M014	S2 frequency	(Hz)
M015		
M016	Output voltage L1	(V)
M017	Output voltage L2	(V)
M018	Output voltage L3	(V)
M019	Output voltage U12	(V)
M020	Output voltage U23	(V)
M021	Output voltage U31	(V)
M022	Output frequency	(Hz)
M023		
M024	Output current I1	(A)
M025	Output current I2	(A)
M026	Output current I3	(A)
M027	Output current IN	(A)
M028		
M029	Output load rate	(%)
M030		
M031	S1-S2 phase shift	(°)

M032	Output Apparent P. L1	KVA
M033	Output Apparent P. L2	KVA
M034	Output Apparent P. L3	KVA
M035	Output Power factor	L1
M036	Output Power factor	L2
M037	Output Power factor	L3
M038		
M039		
M040	Output crest factor	L1
M041	Output crest factor	L2
M042	Output crest factor	L3
M043	Output crest factor	N
M044		
M045		
M046		
M047	Ambient temperature	(°C)
M048	Output Active Power L1	KW
M049	Output Active Power L2	KW
M050	Output Active Power L3	KW
M051	Global Active Power	KW
M052		
M053		
M054		
M055		
M056	Output load rate L1	(%)
M057	Output load rate L2	(%)
M058	Output load rate L3	(%)
M059	Output load rate N	(%)
M060		
M061		
M062		
M063		

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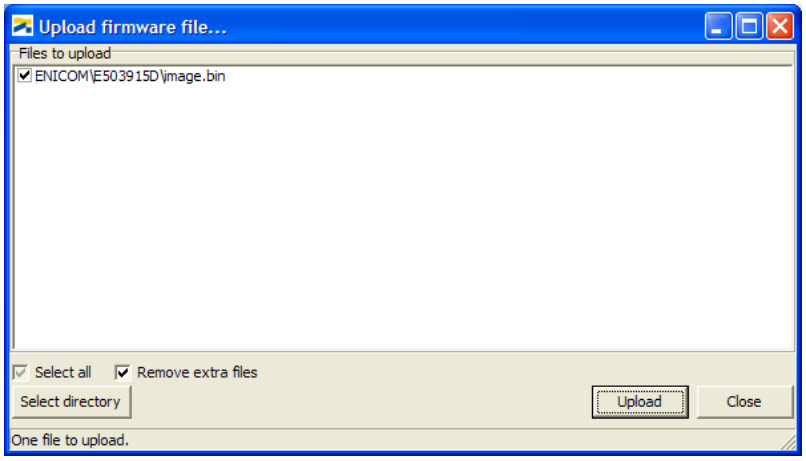
5. FIRMWARE UPDATE

This utility can also update the firmware, configuration files and files of different languages

5. 1. UPDATE ALL (FW + CONFIG)



5. 2. UPLOAD CONFIG FILES

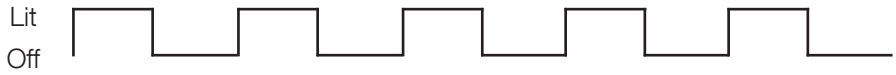
Is done automatically if the option “Both” has been chosen.

6. VERIFICATION DES LED ENICOM

Yellow LED = ENICOM fed

Green LED during the configuration phase

Green LED slow blinking: normal operation:



Green LED blinking fast: configuration file absent:

No Ethernet connection, the 2 LEDs are off. If the network connection is present, but the device is not programmed, the green LED indicates network traffic.

Socomec UPS worldwide

IN WESTERN EUROPE

BELGIUM
Schaatsstraat, 30 rue du Patinage
B - 1190 Bruxelles
Tel. +32 (0)2 340 02 34
info.ups.be@socomec.com

FRANCE
95, rue Pierre Grange
F - 94132 Fontenay-sous-Bois Cedex
Tel. +33 (0)1 45 14 63 90
dcm.ups.fr@socomec.com

GERMANY
Heppenheimer Straße 57
D - 68309 Mannheim
Tel. +49 (0) 621 71 68 40
info.ups.de@socomec.com

ITALY
Via Leone Tolstoi, 73 - Zivido
20098 San Giuliano Milanese (MI)
Tel. +39 02 98 242 942
info.ups.it@socomec.com

PORTUGAL
Núcleo Empresarial de Mafra II
Av. Dr. Francisco Sá Carneiro, Fracção N
2640-486 Mafra
Tel. +351 261 812 599
info.ups.pt@socomec.com

SPAIN
C/Nord, 22 Pol. Ind. Buvisa
E - 08329 Teià (Barcelona)
Tel. +34 935 407 575
info.ups.sib@socomec.com

THE NETHERLANDS
Duwboot 13
NL - 3991 CD Houten
Tel. +31 (0)30 760 0911
info.ups.nl@socomec.com

UNITED KINGDOM
Units 7A-9A Lakeside Business Park
Broadway Lane - South Cerney
Cirencester - GL7 5XL
Tel. +44 (0)1285 863300
info.ups.uk@socomec.com

OTHER COUNTRIES
Tel. +34 935 407 575
info.ups.europe@socomec.com

IN EASTERN EUROPE, MIDDLE EAST, AFRICA

POLAND
ul. Mickiewicza 63
01-625 Warszawa
Tel. +48 22 825 73 60
info.ups.pl@socomec.com

ROMANIA
Heliade Intre Vii Street no.8, 2 District
023383 Bucharest
Tel. +40 21 319 36 88 (89, 81, 82)
info.ups.ro@socomec.com

RUSSIA
4th Street 8 Marta, 6A, 405
125167 - Moscow
Tel. +7 495 775 19 85
info.ups.ru@socomec.com

SLOVENIA
Savlje 89
SI - 1000 Ljubljana
Tel. +386 1 5807 860
info.ups.si@socomec.com

TURKEY
Masuklar Yokusu No:57/2
34357 Besiktas
Istanbul
Tel. +90 212 2580810
info.ups.tr@socomec.com

OTHER COUNTRIES
Tel. +39 0444 598 611
info.ups.emea@socomec.com

IN ASIA PACIFIC

AUSTRALIA
Unit 3, 2 Eden Park Drive (Rydecorp)
Macquarie Park NSW 2113
Tel. +61 2 9325 3900
info.ups.au@socomec.com

CHINA
Universal Business Park
B33, 3rd Fl, 10 Jiuxianqiao Rd.,
Chaoyang, Beijing 100016 P.R., China
Tel. +86 10 59756108
info.ups.cn@socomec.com

INDIA
B1, IInd Floor, Thiru-Vi-Ka-Industrial Estate
Guindy
Chennai – 600 032
Tel. +91 44 3921 5400
info.ups.in@socomec.com

MALAYSIA
31 Jalan SS 25/41- Mayang Industrial Park
47301 Petaling Jaya.- Selangor, Malaysia
Tel. +603 7804 1153
info.ups.my@socomec.com

SINGAPORE
31 Ubi Road 1, Aztech Building
01-00 (Annex) - SG - Singapore 408694
Tel. +65 6745 7555
info.ups.sg@socomec.com

THAILAND
No.9 Soi Vibhavadirangsit 42
Vibhavadirangsit Rd, Ladyao
Chatujak Bangkok 10900
Tel. +66 2 941-1644-7
info.ups.th@socomec.com

VIETNAM
539/23 Luy Ban Bich St.,
Phu Thanh Ward, Tan Phu Dist
Ho Chi Minh City
Tel. +84-839734.990
info.ups.vn@socomec.com

ASIA PACIFIC HEAD OFFICE
Tel. +65 6507 9770
info.ups.apac@socomec.com

IN AMERICA

LATIN AMERICAN COUNTRIES
Tel. +34 935 407 575
info.ups.sib@socomec.com

HEAD OFFICE

SOCOMEC GROUP
S.A. SOCOMEC capital 11 149 200 € - R.C.S. Strasbourg B 548 500 149
B.P. 60010 - 1, rue de Westhouse - F-67235 Benfeld Cedex

SOCOMEC UPS Strasbourg
11, route de Strasbourg - B.P. 10050 - F-67235 Huttenheim Cedex- FRANCE
Tel. +33 (0)3 88 57 45 45 - Fax +33 (0)3 88 74 07 90
admin.ups.fr@socomec.com

SOCOMEC UPS Isola Vicentina
Via Sila, 1/3 - I - 36033 Isola Vicentina (VI) - ITALY
Tel. +39 0444 598611 - Fax +39 0444 598622
hr.ups.it@socomec.com

SALES, MARKETING AND SERVICE MANAGEMENT

SOCOMEC UPS Paris
95, rue Pierre Grange
F-94132 Fontenay-sous-Bois Cedex - FRANCE
Tel. +33 (0)1 45 14 63 90 - Fax +33 (0)1 48 77 31 12
dcm.ups.fr@socomec.com

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