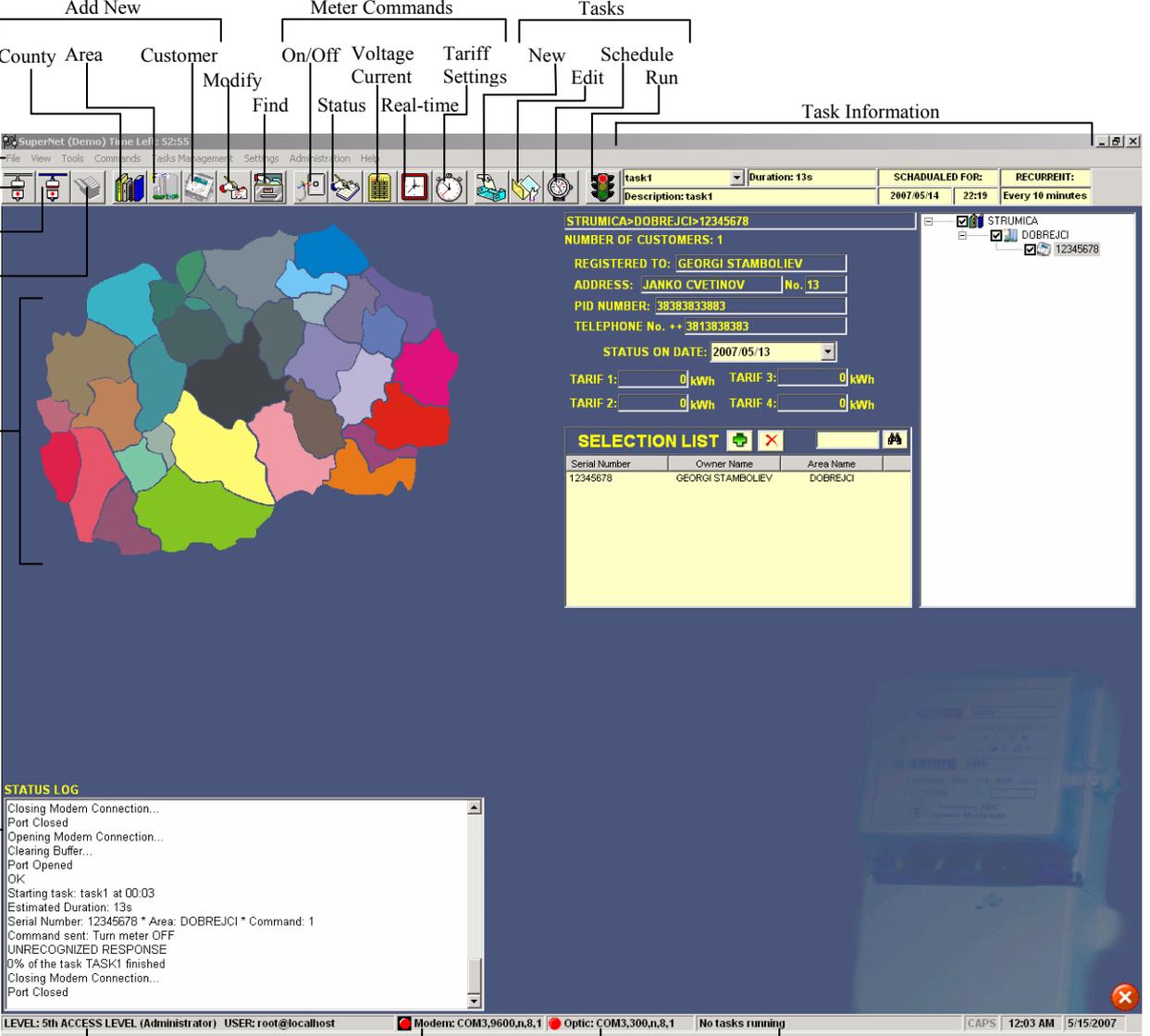


QUICK USER'S MANUAL

How to use SuperNet?

Modem Connection



Menu Structure:

- Add New:** County, Area, Customer
- Meter Commands:** On/Off, Voltage, Current, Tariff, Settings, Find, Status, Real-time
- Tasks:** New, Schedule, Edit, Run

Task Information Panel:

task1 | Duration: 13s | SCHEDULED FOR: 2007/05/14 22:19 | RECURRENT: Every 10 minutes

STRUMICA>DOBREJCI>12345678

NUMBER OF CUSTOMERS: 1

REGISTERED TO: GEORGI STAMBOLIEV

ADDRESS: JANKO CVETINOV No. 13

PID NUMBER: 3838383883

TELEPHONE No. ++3813838383

STATUS ON DATE: 2007/05/13

TARIF 1: 0 kWh | TARIF 3: 0 kWh

TARIF 2: 0 kWh | TARIF 4: 0 kWh

Serial Number	Owner Name	Area Name
12345678	GEORGI STAMBOLIEV	DOBREJCI

Status Log:

```

STATUS LOG
Closing Modem Connection...
Port Closed
Opening Modem Connection...
Clearing Buffer...
Port Opened
OK
Starting task: task1 at 00:03
Estimated Duration: 13s
Serial Number: 12345678 * Area: DOBREJCI * Command: 1
Command sent: Turn meter OFF
UNRECOGNIZED RESPONSE
0% of the task TASK1 finished
Closing Modem Connection...
Port Closed
    
```

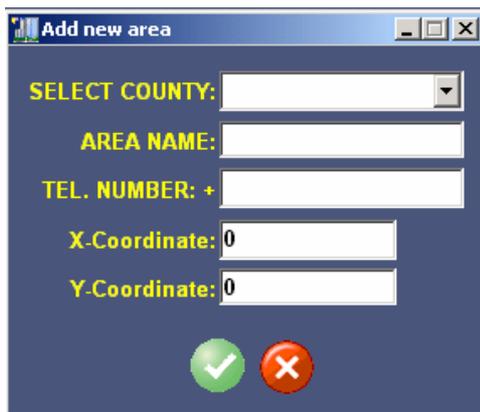
System Tray: LEVEL: 5th ACCESS LEVEL (Administrator) USER: root@localhost | Modem: COM3,9600,n,8,1 | Optic: COM3,300,n,8,1 | No tasks running | CAPS | 12:03 AM | 5/15/2007

Add New County



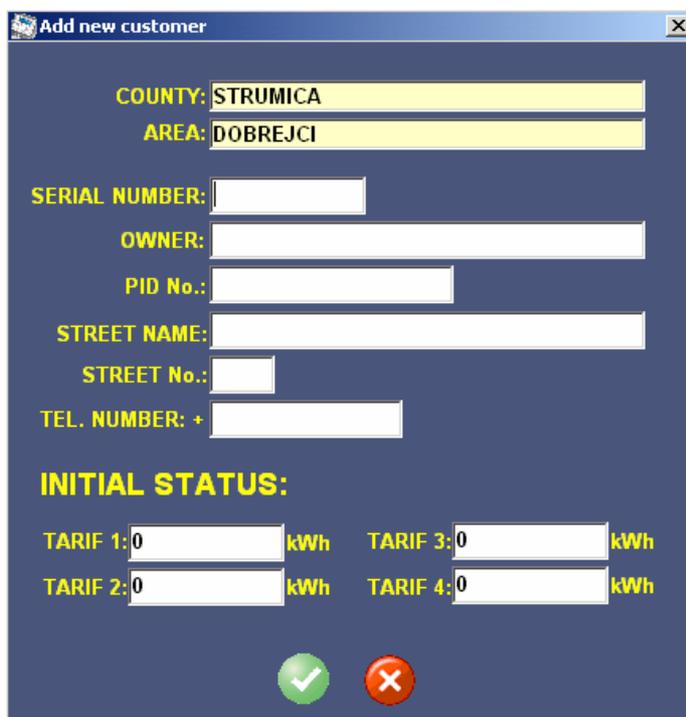
This button is a starting point in creating the network database. It is the first level in the organization hierarchy. Enter the necessary data and press the tick button to save them in the database. When finished press the cancel button. The County Name has to be unique in the counties collection.

Add New Area



This is the second level in the organization hierarchy. Enter the necessary data and press the tick button to save them in the database. When finished press the cancel button. The Area Name is unique in the areas collection.

Add New Customer

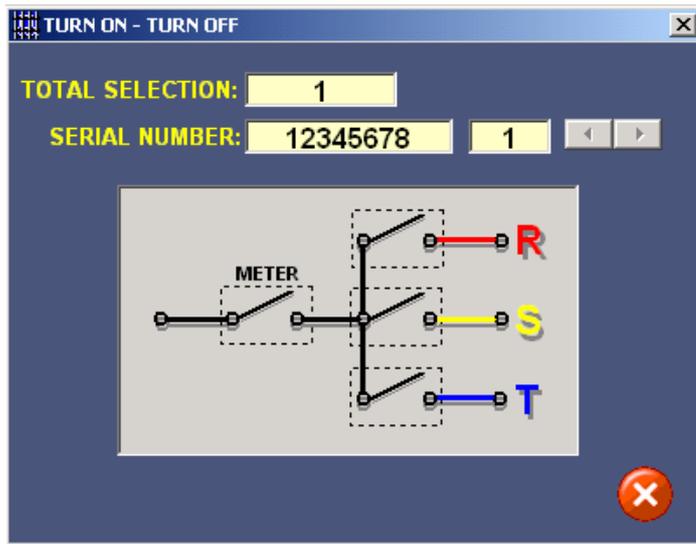


The third and final level in the organization hierarchy is the customer (meter). The unique identification of the customer is the serial number of the power meter. Except of the serial number and the meter's initial status, the rest of the data are changeable.

Meter Commands

Meter commands can be accessed after making a selection of serial numbers. Selection is done by checking the desired serial numbers (when in Tree View mode – Main menu/View/Tree View) or drag selection (in List View mode – Main menu/View/List View) and pressing the Add button on the selection list area. Pressing the Cancel button clears the selection.

Meter Command ON/OFF



This command enables one to turn the power meter on (allowing the customer to consume electrical energy) or turn it off (preventing the customer from further electrical energy consumption). It also has the ability to manipulate a single phase.

Pressing the scroll buttons changes the active serial number.

Phase state can be changed by double-clicking the appropriate switch.

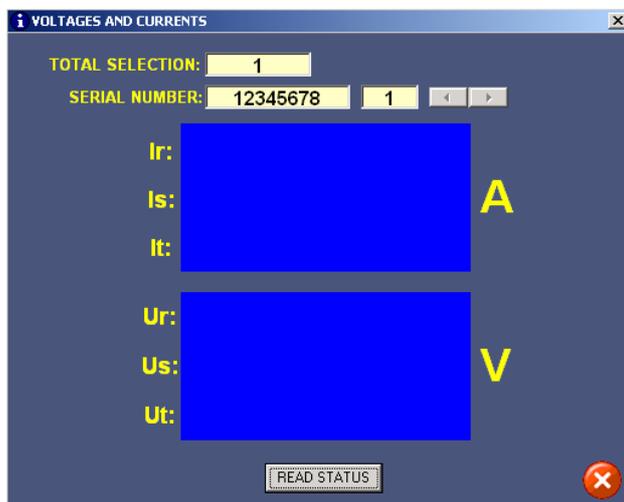
The changes in phase activation are automatically saved in the database.

Meter Command STATUS



The STATUS command enables registration of the total energy consumed by the customer. To read the status simply press the 'READ STATUS' button. The records are automatically saved in the database. The database holds the last 15 records, for each of the four tariffs. By clicking the serial number on the Tree View or List View, these records are automatically shown in the Customer Details Area.

Meter Command VOLTAGE & CURRENT



This command reads the momentary meter's voltage and current. The records are automatically saved in the database. The database holds the last 15 records, for each phase of the voltage and current.

To read the momentary voltage and current simply press the 'READ STATUS' button.

Meter Command REAL-TIME



TIME AND DATE

TOTAL SELECTION: 1

SERIAL NUMBER: 12345678 1

00:00

May 2007

Mon	Tue	Wed	Thu	Fri	Sat	Sun
30	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10

Utilizing this command, the internal meter's clock and calendar can be initialized or changed. The software uses the computer's time which can not be changed from within the SuperNet. The date, on the other hand, can be set by the user.

By clicking the tick buttons, the time and the date are confirmed and set.

Meter Command TARIFF SETTINGS



TARIFF SETTING

TOTAL SELECTION: 1

SERIAL NUMBER: 12345678 1

00:01

TARIF 1

TARIF 2

TARIF 3

TARIF 4

SET

SKIP

WEEKEND STARTS ON: TUESDAY

SET

2

The Tariff Settings command enables the user to set the tariff system applicable in the region. The command can be activated on one serial number or over all of the serial numbers from an Area.

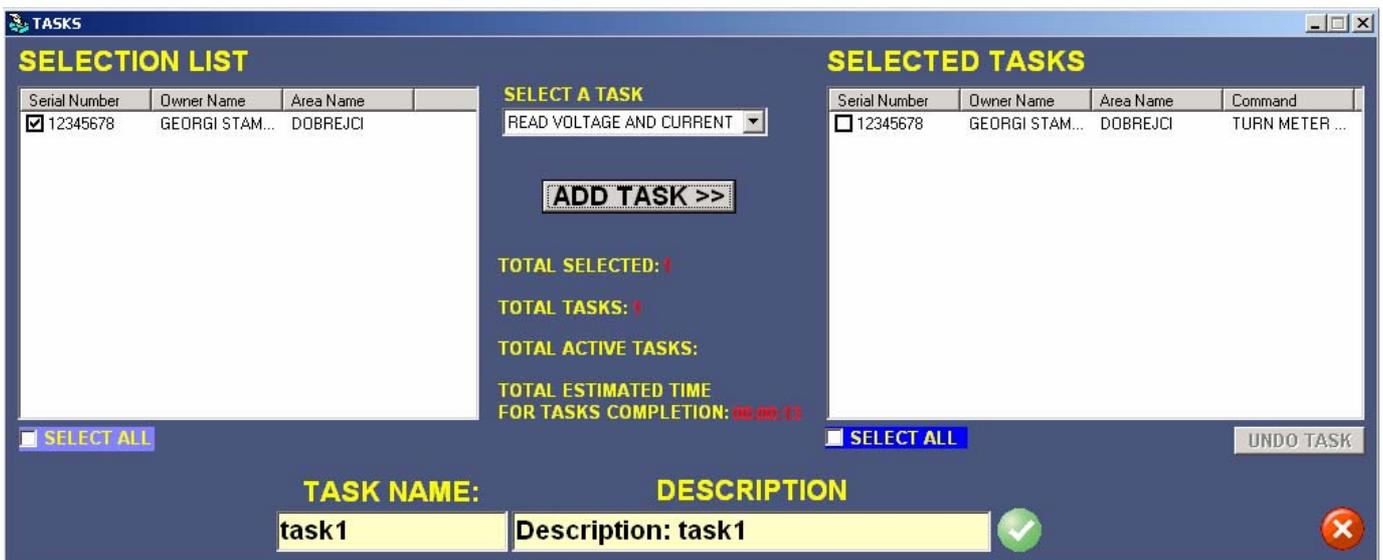
To issue this command there has to be specified the start and end tariff active time and also the weekend tariff. After setting all of the information, pressing the tick button issues the command.

Task Commands NEW / EDIT / SCHEDULE / RUN

Tasks are very useful when there is a need for routine checks or command issuing. To activate this set of commands a selection has to be made. Every serial number is assigned one command at a time. One task can have the same serial number multiple times, with different commands assigned.

When a task is created the program analyses it, looking for contradictions (errors) or obsolete actions (warnings). The user has the ability to continue and create the task even if there are warnings or errors

After the task is created, it can only be run manually by clicking the 'Run Task' button. In order to make the task run automatically, it has to be scheduled. Clicking the 'Schedule Task' button open a window which lists all the created tasks. After selecting a date, time and recurrence, pressing the right mouse button show a menu for scheduling menu. Confirming the schedule activates the automatic task activation.



TASKS

SELECTION LIST

Serial Number	Owner Name	Area Name
<input checked="" type="checkbox"/> 12345678	GEORGI STAM...	DOBREJCI

SELECT A TASK
READ VOLTAGE AND CURRENT

ADD TASK >>

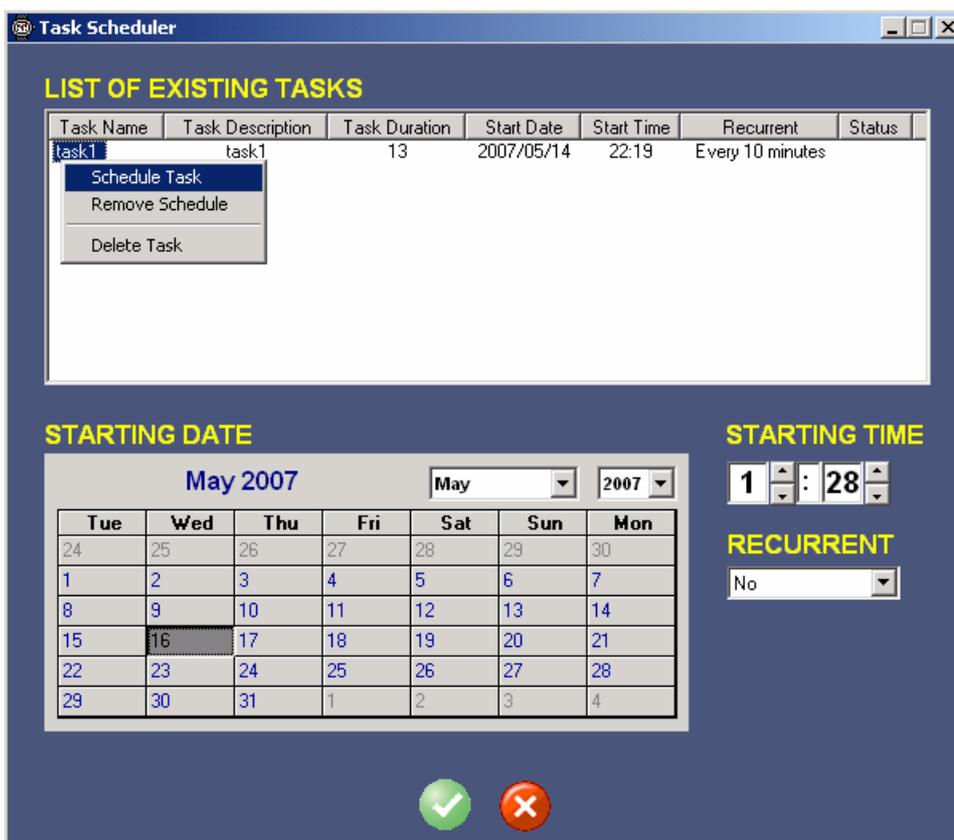
TOTAL SELECTED: 1
TOTAL TASKS: 1
TOTAL ACTIVE TASKS:
TOTAL ESTIMATED TIME FOR TASKS COMPLETION: 00:00:13

SELECTED TASKS

Serial Number	Owner Name	Area Name	Command
<input type="checkbox"/> 12345678	GEORGI STAM...	DOBREJCI	TURN METER ...

SELECT ALL SELECT ALL UNDO TASK

TASK NAME: task1 **DESCRIPTION:** Description: task1



Task Scheduler

LIST OF EXISTING TASKS

Task Name	Task Description	Task Duration	Start Date	Start Time	Recurrent	Status
task1	task1	13	2007/05/14	22:19	Every 10 minutes	

Schedule Task
Remove Schedule
Delete Task

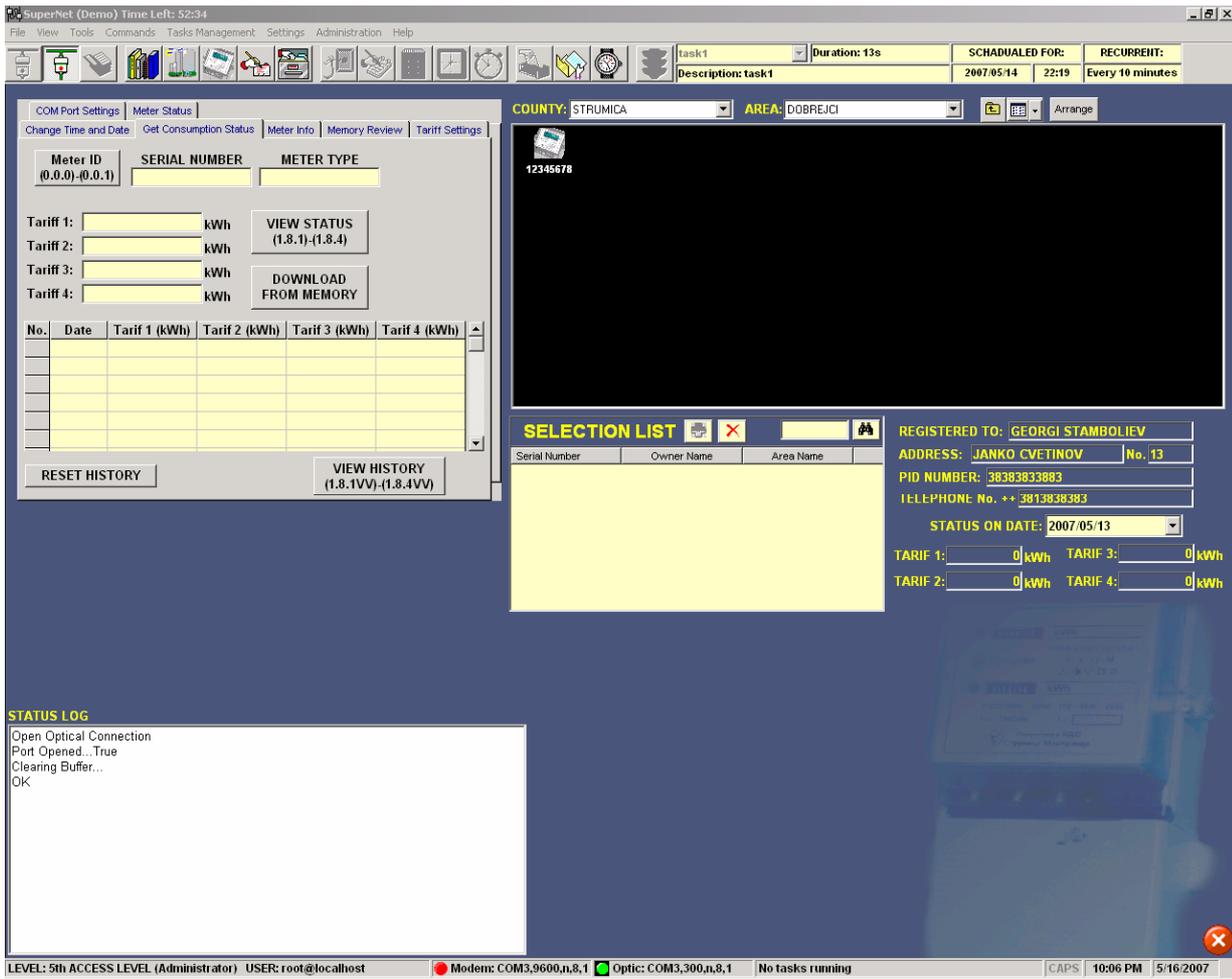
STARTING DATE
May 2007
May 2007

Tue	Wed	Thu	Fri	Sat	Sun	Mon
24	25	26	27	28	29	30
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

STARTING TIME
1 : 28

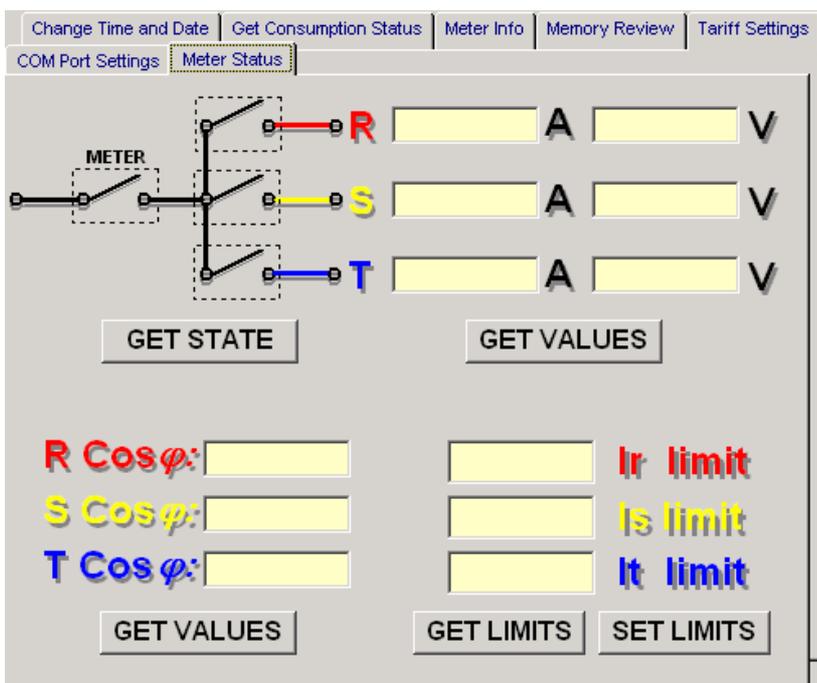
RECURRENT
No

Optic Connection



The SuperNet software has also the ability to connect to the power meter through an optic head connection. By pressing the 'Optic Connection' button, the connection is opened and a tabbed control, containing the necessary commands is shown.

The first user action, after opening the optic connection, should be getting the meters identification. This is utilized by pressing the 'Meter ID' button on the 'Get Consumption Status' tab.



Many of the commands are dependant on this information, so that the data can be interpreted correctly.

Besides all of the features that exist in the power meter, a very important one is the ability to program and recall the limiting currents. This option is found on the 'Meter Status' tab.

The purpose of this function is to assure power consumption within the preset limits. In case the meter registers a value of the current larger then the set limits (not including momentary peaks) the meter automatically shuts off the customer.

Please note that neither the meter nor the software is aware of change of the optic head from one meter to another. In case the optic head is replaced from meter to meter press each time the 'Meter ID' button so as to assure correct data interpretation.



The energy meter (not included in all versions) has also the ability to record the complete status at a certain period of time. This period is programmed by the user and ranges from one to sixty minutes. The data are recorded in the meter's internal 12MB of memory, hence the recording duration can range from 47 days (1 minute interval) and up to 2820 days (60 minutes interval). This data can be downloaded and analyzed by using the optic head connection.

