Архангельск (8182)63-90-72 Астана (7172)727-132 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Волгоград (844)278-03-48 Вологара (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89 Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)279-98-46 Казань (843)206-01-48 Калининград (4012)72-03-81 Калининград (4012)72-03-81 Каров (3832)68-02-04-62 Киров (8332)68-02-04 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Липецк (4742)52-20-81

Киргизия (996)312-96-26-47

Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новосибирск (383)20-46-81 Новосибирск (383)227-86-73 Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16

Россия (495)268-04-70

Пермь (342)205-81-47 Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Севастополь (862)22-31-93 Симферополь (3652)67-13-56 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13

Казахстан (772)734-952-31

Сургут (3462)77-98-35 Тверь (4822)63-31-35 Томск (3822)98-41-53 Тула (4872)74-02-29 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Ярославль (4852)69-52-93

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ExpertPower 5.x

User Manual

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Overview

This manual is intended to help new users become familiar with the main functions and pages of the ExpertPower Energy management web application.

Note that installation and setup topics are covered by other dedicated materials.

Manager Menu

Main/My View

The main view is a configurable personalized switchboard allowing to present information in various ways.

Layouts

The main view has two optional layouts – the Box view and the Map view. The Box view allows you to concurrently present data from multiple devices, and the Map view show a map of your metering devices. You can switch between the two via the Choose layout menu on the upper right corner.

Dashboard \\ My View	Close Layout
Map View	Box View
	Save Cancel

Box view

The main screen allows viewing four smaller independent screens. Data is shown in either a table grid, or as a line diagram or a bar chart. The screens are defined for every user according to his or her permissions.

Click the pencil icon to edit the specific box device selection and change the view settings.

odules	Devices		
History	- A Test_QA_plus	A	
Last Reading	🛛 🖬 Bill_Test		
Max Demands	🖲 🖬 Emb		
Total Energy			
rotal Energy	- 🕑 104939-PM130EHplus-40		
TOU Import	- 🚱 EM133-3		
TOU Export	- 🖅 EM133-8		
Waveforms	- 🖅 EM133-83		
Waveronnis	- 🕑 PM130-20		
	- 🚱 PM130-42	-	

- 1. Select the view contents according to the current user permissions
- 2 Select the devices of choice from the device selection tree
- 3 Select the type of information to show
- 4 Click Add to complete
- 5 Click Cancel to cancel out

Click the View button at the bottom of every box to zoom in on that box by going to the dedicated specific page related to it. For example – clicking on View below the Last reading box will open a tab with the Last reading page for the device defined for the box.

Map View

Map view allows to graphically navigate between the devices defined for the customer. The Map provides a tree like layout of multiple devices. Clicking on one group will show the sub group of devices under it. Clicking on one device will move to a page presenting that specific device. The Edit button on the upper right corner allows to switch between several maps for the user.



Device Selection Tree:

Devices Tree	•	✓ Si
SATEC •	Search	VICE
Select : Single / Devices / Comm. Device	s	ä
Clear all		
E- A SATEC		
🖻 🔄 💼 Data Center		
- 🗹 😁 Main Load		
Servers Room		
PM175 SATEC EMB		
🕂 🗇 🔞 Main Load		
🕂 🔲 💼 site for Marketing		
🖻 🔲 🔂 Main Load v		
🖻 🔲 💼 Submeters		
Communication room		
🚽 🔄 💮 Main air conditioning		
— 🔲 🐵 Main Lightning		
- 🖂 🐵 Production hall		
🖳 🖂 🥵 R&D department		
Rooms air conditioning		-

Single

Allow to select a single Customer/Device/Comm Device from the tree.

Devices

Allow to select one or more device from the tree.

Allow to select one or more communication device.

Search the Tree



The Search option appears on the top of the Device selection tree. It applies to one or more of the three categories: Devices, Comm. Devices and Sites. Only selected categories (appearing in blue) will be included in the search. In order to exclude a category from the search, click it and it will turn white. For example, the following image shows the search tree after clicking the Comm. Devices and Sites top buttons, to make them grey and exclude them from the search:



Device selection

Click the checkmark of one or more specific devices or sites of choice, and then for the selection to take place, click the green checkmark on the top right:



Energy View

This page provides a picture about a certain device in terms of performance, consumptions and cost



Readings

Readings pages are used to present various devices from the following aspects:

- Last reading
- History
- Max demands
- Data logs

Last reading

This screen shows the last reading from the device. You can browse between the different readings using the arrow button. At the upper part of every data group you can find a link to the history page. Clicking the parameter will also open the History page at the related parameter location.

adings \\ Last Rea	ding				Browse read	dings < >	↓ X į	
ustomer:SATEC Sit	e:site for Ma	rket	Location:	<i>l</i> lain Load v	Device: Virtual By Form 11/15/2016 2	22:30		
Phase Basic Measu	rements			<u>History</u>	Total		<u>History</u>	
Phase	L1	L2	L3	Unit	Name	Value	Unit	Link t
Voltage (Primary)	235	237	236	V	Active Power	31.29	kW	Histor
Current (Primary)	64.68	37	31.59	A	Reactive Power	2.09	kvar	
Active Power	15.2	8.64	7.45	kW	Apparent Power	31.36	kva	
Reactive Power	0.298	1.49	0.298	kvar	PF	0.998	PF	
Apparent Power	15.2	8.77	7.46	k∨A				
55	4.0	0.005	0.000		Total Demands		<u>History</u>	
PF	1.0	0.985	0.999	PF	Name	Value	Unit	
					Power Demand	31.29	kW	
					kVA Demand	31.29	kVA	

History

This screen shows the device historical readings. You can select Phase or Power & Demand tabs on the top, or the Customize tab in order to select specific fields: Check the specific fields and Submit to view their information.

Date selection

Dates can be selected by clicking the date selector from the upper right corner.

Graph

The top of the graph area has a show/hide button on the right, and a parameter selection on the left.



Data table

The table shows the selected reading fields. In order to see the details of a specific reading, click on its record time:

Decend Time		Voltage LN, V	1		Current, A			Active Power, I	w	
Record Time	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1
11/16/2016 15:30:22	233.2	234.9	234.5	7.72	14.52	21.64	1.39	3.22	4.94	1.2
11/16/2016 15:01:52	233.3	234.7	234.1	7.72	14.56	21.56	1.39	3.22	4.94	1.2
11/16/2016 14:30:20	233.6	235.2	235	0	6.32	13.84	0	1.49	3.22	0
11/16/2016 14:02:04	233.7	234.8	234.5	0	6.28	13.88	0	1.49	3.22	0
11/16/2016 13:30:27	232.5	234.1	233.8	12.84	19.56	27.4	2.45	4.18	6.19	1.78
11/16/2016 13:01:49	232	233.8	233.1	0	6.28	13.88	0	1.49	3.22	0
11/16/2016 12:30:20	233.1	234.5	233.7	4.36	10.6	18.52	0.816	2.45	4.27	0.528
11/16/2016 12:01:58	233.3	234.8	234.5	8.72	15.36	13.64	1.68	3.41	2.93	1.2

As a result, the following details are shown for that reading:

leadings \\ Last Read	ling						
Customer:SATEC Site	:Submeters	Locati	on:Main a	ir conditio	Device: BFM136-036 Logs 11/16/2016 15:	30	5
Phase Basic Measure	ments			<u>History</u>	Total		<u>History</u>
Phase	L1	L2	L3	Unit	Name	Value	Unit
Voltage LN (Primary)	233.2	234.9	234.5	V	Active Power	9.46	kW
Current (Primary)	7.72	14.52	21.64	A	Reactive Power	3.5	kvar
Active Power	1.39	3.22	4.94	KW	Apparent Power	10.13	KVA
Reactive Power	1.2	1.2	1.1	kvar	PF	0.939	PF
Apparent Power	1.78	3.41	5.04	KVA	Frequency	49.97	Hz
PF	0.762	0.937	0.974	PF	Neutral Current (Primary)	13.52	А
Energy Name			Value	<u>History</u> Unit	Demands Phase 11 12	13	<u>History</u> Unit
Name			Value	Unit	Phase L1 L2	L3	Unit
Active Energy			49,345	kWh	Max Amp. Demand (Primary) 31.36 39.32	43.8	A
Active Export Energy			0	kWh	Total Demands		History
Apparent Energy			61,732	k∨Ah	Name	Value	Unit
					Max. Power Demand	24.15	kW
					Acc. Power Demand	0.24	kW
					Max. kVA Demand	24.15	kVA.
					Power Demand	7.82	kW
					kVA Demand	8.11	kVA

Max Demands

In this page you can see the Max Demand data, in a table and a graph across a Day/Month/Year according to the selected resolution, during the selected date range.



Clicking on the upper right data range selector, opens a menu for selecting a specific date range:

Readings \\ Max Demands		Date: 11/1/2016 - 11/17/2016
Time Range Fixed Time Start Date 11/1/2016	End Date 11/17/2016	Resolution Weeks •
		Update Cancel

If you select the Fixed Time option, you can select a specific year of choice from a dropdown:

Readings \\ Max Demands	C C C C C C C C C C C C C C C C C C C
Time Range Fixed Time	Resolution Months
	Update Cancel



The graph legend allows to hide or show specific parameters:

Consumption

Consumption pages offer various views around energy consumption measured by the metering devices. When selecting the Consumption tab, first select the usage type of choice: Electric energy, Gas, Water etc. and then select the duration and resolution for which you want to see the data:

exper	power		Manager A	dministrator				
Dashboard	Readings	Events	Consumption	Power Qualit	y Billing	Generators	Rep	oorts
			Energy	Tot	al			
			Water	тс	U Import			
ACES			Air Condition U	sage TC	U Export		te:HIT	Locatio
DEV			Gas	Tot	al Distribution			Previous
			Fuel	тс	U Distribution		526,303 174,107	
				kWh	Export		0	

Energy / Total

In this page you can display total consumption on a daily or monthly basis for one or multiple devices. Information is displayed in both a data table and a graph. The top of the page shows the total consumption in the selected period and the table below shows specific numbers according to the selected duration and resolution.



Energy TOU Import/Export

These pages show consumption according to Time Of Use Peak, High and Low tariff durations throughout the day, in a monthly or daily resolution, shown as a data grid as well as a graph.

The top of the page shows the total per TOU tariff duration:

				N D	
Start Date 11/1/2016	<u>∽</u> 00:00 🔄	End Date 11/18/2016	00:00	Res	olution Days
ustomer:SATEC Site	Data Center Location:	Main Load Device: PM1	<u>75</u>		UpdateCane
Tariff	Proviour	Processi	16	-100	Cort (MIS)
antin Daak (k)Mb)	421 222	442 904	12.582	t F	COSt (Mia)
tich (kWh)	144 005	145.980	1 785	17	R 78
ow (kWh)	349 431	354 117	4 686	38	4.24
fotal (kWh)			19.013	2.0	77.48
Power Factor Breakdown	0.993	*			
Day of month	Peak (kWh)	High (kWh)	Low (kWh)	Total	Cost (NIS)
11/1/2016	914	55	198	1,167	132.09
11/2/2016	1,037	72	215	1,324	150.02
11/3/2016	981	62	277	1,320	147.34
11/4/2016	0	389	266	635	58.77
11/5/2016	0	105	525	630	53.57
11/6/2016	959	53	212	1,224	138.46
11/7/2016	1,061	74	225	1,360	153.94
11/8/2016	1,104	68	277	1,449	162.79
11/9/2016	971	58	259	1,288	144.27
11/10/2016	944	62	231	1,237	139.11
11/11/2016	0	417	306	723	66.85
11/12/2016	0	117	592	709	60.26
11/13/2018	1,020	56	238	1,314	148.26
11/14/2018	1,020	65	239	1,324	149.24
11/15/2016	941	63	213	1,217	137.38
11/16/2016	1,044	69	237	1,350	152.37
11/17/2016	586	0	176	742	82.76
Graph		*			
1 750					
1 500					
	1.1			1000	
1 250					
1 000					
KW					
750				_	_
500					
				_	

Energy TOU/Total distribution

These pages graphically highlight the distribution between multiple devices:



Event View

ExpertPower can detect various types of configurable events, such as disconnections, failures or exceptional consumption. Events can also trigger notifications via emails or SMS messages.

Events are shown on the Event View page for the selected date duration, under 3 categories: Info, Warning or Critical. Clicking on the blue/orange/red category buttons on the top right, will filter the shown events accordingly.

Note: in order to see events the user needs to first define their triggering conditions in the administrator menu for any site or device.

iston	ner:SATEC S	ite:Submeters	Location:Ma	in air conditio	. Device: BF	M136-036 L	.ogs		
	I 🗸 🗙						🗘 Info	Warning	Critical
Туре	Date	Category	SubCategory	Description	Info	Source	Duration	Value	Mail Sms
Ģ	9/11/2016 07:52:30.163	Application	Communication	No connection to device	Communication Device BFM136 SATEC	Main air conditioning	39:42.3 min		
Φ	9/10/2016 09:11:03.000	Application	Communication	No connection to device	Communication Device BFM136 SATEC	Main air conditioning	22.0 Hours		
Φ	9/9/2016 08:11:02.740	Application	Communication	No connection to device	Communication Device BFM136 SATEC	Main air conditioning	1:42:47 Hours		

Event Log

This page shows the event log for the selected meter or communication device. The events are shown on a table. The table header provides a list of event types for selection and display on the table, once you check and click Submit.

ents \\ Event Log	l			▮▓릘	Date: 9/4/2016 - 9	/12/2016
ustomer:SATEC Si	te:Submeters Locat	ion:Main air conditio	Device: BFM136	-036 Logs		
Select Event Types						
 Setpoint Event 	 Setpoin 	t activity	Comm. activity	(Front panel activity 	
 Self-check 	 Self-up 	date	Run-time Error	(Hardware Event	
External Event	Corrupt	ed				
Drag a column header her No Date	re to group by that column / Time	Description		Details		Value
222808846 9/11/2	2016 08:30:27.014	Comm. activity: DATA K	EEPING	CLR TOU DEMD		
222808842 9/11/2	2016 08:30:25.493	Comm. activity: DATA K	EEPING	CLR DEMANDS VOLT	AMPERE	
222808839 9/11/2	2016 08:30:25.427	Comm. activity: DATA K	EEPING	CLR DEMANDS POWE	ER	
222808838 9/11/	2016 00:01:13.328	Comm. activity: DATA K	EEPING	CLR TOU DEMD		

Event Summary

This page shows specific important daily events from all customer devices which should be taken care of and resolved. Click the arrow button on the right of the event type to see specific events and their device and time information.

Events \\ Event Summary	▮ 🎗 🚔	
Disconnected Devices		Click to one
Disconnected Comm. Devices	-	related events
Problematic devices requests	•	
Problematic Total Energy	•	
Problematic TOU Energy	•	

Notifications

This page shows all notifications which were sent to the customer via email or SMS.

Analyzed Events

Adminsitrator > Events > Analyzed Events

1. First select a customer and hit "New":

Customer: SATEC	
SATEC	New
consumption event test	
daniel test	
EVENT TEST1 Test event	
hedva test	
V>235 v>235 pm175hh prod	

2. Fill in the mandatory fields – Event name, Start message to show or send upon opening the event, End message, Source and specific device from the selection tree on the right, and click "Conditions":

	Events \\ Analyzed	Events			
	Customer: SATEC	Event Name:			
				Clear	Back Save
	Event Name			Select Event Source	
Densities of Solida	Event Name			Basic Measurements	· Ontional event
Required fields	Field Require Start Message	ed		Basic Measurements	sources
	Start Message			Event Log	
	Field Requir End Message	ed		Generator Controller Energy & Demand	
	End Message				
	Field Requi	ed			
	Open Action	Close Acti	n		
		•	۲		
	Warning Level				
	Info	Warning	Critical		
	Description				Next step enabled
					fields are filled in
				(
	·		0	L	Conditions

3. Click Add to create an event triggering condition. You can add multiple conditions with AND or OR relation between them:



By selecting Define Time Criteria you can also set time specific conditions, such as for the event to be only considered during daytime hours, or only during a weekend such as the following:

Events II Analyzed Events						
Customer: Test_QA_plus Event Name:						
Define Time Criteria		Def	ine Event Criteria	Remove	Add	Save
Day of week	•	>= •	Saturday •	>= •	Sunda	y •

Always remember to click Save in order to complete the analyzed event definition and save your work.

Notification settings

Administrator > Events > Notifications

This page allows administrators to define sending email or SMS notifications upon triggering of various events.

Reports

Reports are first defined by going through the Report Wizard, then they can be saved, and regenerated, exported or edited from the Report list:

Consumption Power Quality	Billing Generators	Reports		
Reports	Report Wizard	Reports Wizard Reports List		
Set n	eport title	Select report items	Select dates	

When going to the Report Wizard, give your new a report a name and select its type from the drop down. Now appropriate fields required for that report, will be shown such as source, graph type, start/end time etc.

In most cases you need to also select the device/s for the report, and the duration. Once you are done filling in all required fields, for some reports you may have to go through additional wizard cards, such as in the example below to allow grouping several devices into one or more groups:

Set report title	Select report items	Select dates	Schedule
My single period report	Select device	Time Range	Fixed Time Operiodic
Choose report type		Resolution hour	ly quarter •
Single period comparison		Start	
	A A A A A A A A A A A A A A A A A A A	start	
Stacked 🗸	A A	End	
Normalize consumption data by total area	Devices Tree		
	Devices free	<u>^</u>	
	Start typing customer, site or dev	ce	
		•	
	Roy test		
	A PLACE		
	Data Center		
	Main Load		
	Servers Room		
	PM175 SALEC EM	3	
	💮 Main Load		
	site for Marketing		
	🗄 💮 🗏 Main Load v		Next
	Submeters		
	🕑 Communication roo	m	
	Main air conditionir	na 💌	

single period report	a		
Add Group +			
Main Load			
			Previous Next

Click Next to select data source fields. Click "Add" for every field you want to add:

Group		1							
Basic Measurements		•							
Field									
Accum. kVA Demand		•							
Aggregate method	Minimum	•							
Series type	Line	•							
eries type									
							Previous Add	Create	inish
						l	Previous Add	Create	inish
tegister group name	Изаде Туре	Tariff	Status Value	Field Name	Series	Aggregate	Previous Add Value difference	Create F	inish

Once you are done, click Finish to save the report, or Create to generate and save it.

Saved reports are then appearing on the Report List to allow they further reuse:

Reports \\ Reports List							
Number	Name	Туре	Last Updated	Periodic	Completed	Action	
3553	My single period report	Single period comparison	11/17/2016 6:20:56 PM	×	✓	Generate 🔹	
			4414710040				

Click the Action selection for the following options and click the green triangle for the action to take place:



Energy Intelligence

The Energy Intelligence module provides strong and simple data analysis tools, such as configurable dashboards, allowing to quickly gain consumption insights from your site or any group of meters of choice.

Open the Energy Intelligence module by clicking the vertical Energy Intelligence on the right hand side of the screen:



Following is a description of the various module components:

Object selector

All Energy Intelligence charts are always reflecting the selected device / group, dates and resolution that appears on the top toolbar. Click the device name on the top toolbar, for the object selector to open up, showing existing group definitions added by the current user, also allowing to Add Device or Group

	e) Inverter	A //	< 5/15/	2016 -	11/15/20)16 > // N	lonth
Groups		Pin X	Today	Yesterday	Past week	Past month	Past 6 months	Past ye
Ventilation Room (6 devices)	K							
Computer Building (5 devices)		a						
Data Center (2 devices)								
Servers Room								
Main Load								
Servers Room								
Group of 4 devices (4 devices)								
Solar 275 Mill Road								
Inverter C								
Group of 2 devices (2 devices)								
Inverter A								
Add Device / 0	Group							

Upon clicking the Add Device/Group, the Device selection tree opens up.

The device selection tree will also open directly if you click the round plus icon to the left of the current device on the top toolbar.

You can use the tree's top search option or just scroll and click on any device or site once to select it, or click it again to exclude it from the current selection which appears below the selection tree. Click the green bottom "Select" button for your selection to appear on the group list and close the tree.

Once selecting more than one device, a default group name will appear on the list, which you can rename according to your requirements (e.g. 'Building A' for a group of all that building meters):

Groups	Pin X
Ventilation Room (d devices)	
Group of 2 devices (2 devices)	Expand Rename Edit Delete
	Add Device / Group

These device selection groups will remain defined under your user account unless if you decide to use the Delete option on the right hand side (see below) to delete it.

Date selector

You make changes to the duration/resolution selection in one of 3 ways:

- Click the current date duration appearing on the top toolbar
- Click the current resolution
- Click any fixed duration from the list: Today, Yesterday, Past week, Past month, Past 6 months or Past year.

Dates	Selector							Unpin X	//	< 5/15/	2016 - 1	11/15/20	016 > // N	Ionths
Cust	om	Today	Yesterday	Past week	Past month	Past 6 n	nonths	Past year						
Janua	ry Feb	ruary Marc	h April May	June July	August September	October	November	December	Today	Yesterday	Past week	Past month	Past 6 months	Past year

The date selector also provides a 'Custom...' option to select specific days / hours for the start and end times.

User defined Dashboards

You can make you own dashboards mixing any of the dozens of available widgets, to best suit your needs:

iiil Dashboards	⊚ Analysis	হ Live Data			
DASHBOARDS		over over the			
Energy	Hover ov header ar				
Maintenance	ico	on			
Executive					

Once you click the above grey menu icon, select the Add Dashboard option that will pop up.

At this point a blank "New Dashbord" will become available on the left. Click to select it:

iii Dashboards	≎ Live Data		
DASHBOARDS			
Energy			
Maintenance			
Executive			
PV View			
New Dashboard /			

Click the green menu icon on that dashboard in order to Add a Widget:



Once you click the Add Widget, an empty area is created for the widget on the blank canvas. Click Edit Widget, to select the type of widgets from the dropdown.

DASHBOARDS	New Widget	Edit Widget
Energy		Delete Widge
Maintenance		
Executive		
PV View		
New Dashboard 🗸		

Once you selected a widget and it is displayed, you can hover over its boundaries to see a double sided icon that can be dragged in order to stretch or move the widget around the canvas.

Repeat the steps above to addmore widgets to your dashboard. From the menu icon on the dashboard name you can Print it over to PDF or rename it as needed.

Calculation formula

Administration Menu > Maintenance> Calculation Formula

ExpertPower 5.0 presents a new module - a calculation formula engine. The motivation is to consolidate all the required formula definitions in a single location. A formula represents a set of one or more conditions. The conditions are written in a script like supported language, as explained below. The formula can be used as a billing calculation or as consumption event criteria.

Accessing the formula engine

expert	power™					Manager menu	Administration menu
Maintenance	Data Entry	Permissions	Events	Billing	Licen	se Mngmt.	System Settings
System Setup Generic Device	e Types	New Formulas are a	added to the list o	f Formulas only once	saved		
Log							+ Add Formula
Map Wizard Calculation Fo	ermula a				Company Company	Result	Resolution /S V
Formula + - Fullscree					Other	Resolution	Available Functions
1							
						Test	Save

Creating a new formula:

To create a new formula you must click on "Add formula"

expert	power™				Man	nager menu	Administration menu
Maintenance	Data Entry	Permissions	Events	Billing	License M	Angmt.	System Settings
		New Formulas are ad	ided to the list o	f Formulas only once sa	wed		
All Formulas							+ Add Formula
Му Гоз	mula			Cc	ompany Select	Sum t	o Resolution
No calculation items.							
Formula + - Full Scre					Other R	esolution	Available Functions
1							

1. Enter a formula name and click on Save

In the first stage, please enter a unique name for the formula and click "save."

expe	ertpo	ower™					lanager menu	Administration menu
Maintenance	E)ata Entry	Permissions	Events	Billing	Licens	e Mngmt.	System Settings
			New Formulas are a	added to the lis	st of Formulas only once	e saved		
All Formulas								+ Add Formula
My No	ew	Test	Formul	La X		Company Select	Sum	to Resolution
No calculation it	tems		CI	earSave	Click on the X	Clean		
Formula + - Ful					the Text Box	Other	Resolution	Available Functions
1								

2. Add an Item:

An item represents a type of data you want to include and use in the formula. See below for details regarding each available item type.

expertpow	/er™			Ma	nager menu A	Administration menu
Maintenance Data E	ntry Permissions	Events	Billing	License	Mngmt.	System Settings
All Formulas						+ Add Formula
My New Te General Customers No calculation items + Add	est Formul	la Duplicate		Company Select	Sum to	Resolution S
Formula i i i Full Street	ulation pare Limit s us us Value shold Profiles ge ge Type Calculation			Other F	Resolution	Available Functions

A. Clicking on Add Item opens a window:

expert	oower™)					Manager menu	Administration menu
Maintenance	Data Entry	Permissions	Events	Billing	Licen	se Mngmt.	System Settings
All Formulas							+ Add Formula
My new	teat	Formu	La. Iear Save		Company Company	Resu V Da	ays
Formula + - Fullscreen	+ Add Item Calcu Item N	lation Formula Item			X Other	Resolution	Available Functions
	ltem T	iveEnergy ^{ype} age			 ~		
	Usage Ac	e Type tive Energy Ir	mport		 Image: A set of the set of the		
	Tariff		Capre	Add 1	-		
						Test	Save

Enter an Item Name:

Please enter a unique name for the item. You can enter spaces.

expert	oower™					lanager menu	Administration menu
Maintenance	Data Entry	Permissions	Events	Billing	Licens	e Mngmt.	System Settings
All Formulas							+ Add Formula
My New General Customers No calculation items	Test	Formul	La Duplicate		Company Select	Sum to	Resolution /S
Formula + - Full Screen	Calculation Fo	rmula Item		X	Other	Resolution	Available Functions
	Item Name activeEn Set to zero wher Item Type Usage Usage Type Active E Tariff General	n no source defined		~ ~ ~	Please enter a un item. You can en	tique name for ter spaces. Test	the

Item Type

Clicking on Item Type opens a list of available item types:

Calculation Formula Item X
Item Name
New Item
Set to zero when no source defined
Item Type
Calculation
Compare Limit
Cost
EPI
Prices
Site
Status
Status Value
Threshold
TOU Profiles
Usage
Usage Type Calculation

1. Usage – Usage represents data read from a device such as active energy import, export, max demands etc. After selecting the usage type, a tariff can be selected.

If you need to associate the tariff based on what is defined in the price for each line in the payment program, you must select the "From Variables" options.

Please note: The tariffs list is presented , once you set up the relevant Electric Company



2. Usage Type Calculation – represents a calculation performed on usage data. A list of available calculations appears below.

<u>Usage Type and Tariff is Active</u> : According to Usage Type and tariff I chose Returns true if the tariff is active.

<u>Active tariff for device in date</u>: Summarizes the number of times the tariff is active for the device in date.

Proportional number of tariff days in period: Summarizes the proportional number of days in the period, to the same tariff

expertp	ower™					Manager menu	Administration menu
Maintenance	Data Entry	Permissions	Events	Billing	Licen	se Mngmt.	System Settings
All Formulas							+ Add Formula
My DOW	tost	Formul	-		Company	Resul	It Resolution
My new	Leat	FOLMUL	. a .		Israel Elec	tric (🗸 🖂 Da	ys 🗸
No calculation items	+ Add Item	Cle	ar Save				
Formula 💌 🖃 Fullscreen	Calo	ulation Formula Item		>	Other	Resolution	Available Functions
1	Item	Name					
	a	ctiveEnergy					
	Item	Туре					
	U	sage		~			
	Usa	де Туре					
	A	ctive Enerav Im	port	~			
	F	rom Variables					
	- F						
	P	eak Summer					
	L H	igh Summer				Test	
		ow Summer				Test	Save
		eak Winter					
		Ign winter					
	P	eak Fall/Spring					
	Ľ.	igh Fall/Spring					
Contact us About	t Help L	ow Fall/Spring					SATEC

Friday or the eve of holiday: Summarizes the energy on Fridays and holiday eves when the tariff is special

<u>Saturday or Holiday</u>: Summarizes the energy on Saturday and holiday when the tariff is special

Calculation Formula Item	X				
Item Name					
activeEnergy					
Item Type					
Usage Type Calculation ~	•				
Usage Type					
Active Energy Import ~	•				
Tariff					
From Variables ~	•				
Usage Type Calculation					
Usage Type and Tariff is active					
Active tariff for device in date					
Proportional number of tariff days in period					
Friday or the eve of a holiday					
Saturday or the Holiday					

3. Threshold - Threshold from the available thresholds list.

Please note: The threshold list is presented, once you set up the relevant Electric Company.

Company		Sum to Resolution	
PSE&G	~	Days	~

4. Status – A status represents an object from a selection of available objects definitions. Its value is entered by external interfaces and is mainly used in power plant management projects. Next to each status appears its identification number.

Calculation Formula Item X	
Item Name	
Status	
# Units - 115	
Available net capacity to IEC - 35	
Bid - 173	
Bid Down Real Time Step1 Agg - 259	
Bid Down Real Time Step1 Change Rate - 260	
Bid Down Real Time Step1 ISO - 258	
Bid Down Real Time Step1 Limit - 257	
Bid Down Step1 Change Bate - 239	
Bid Down Step1 Limit - 236	
Bid Down Step1 NS/MWh - 238	
Bid Down Step2 Change Rate - 244	
Bid Down Step2 Limit - 240	
Bid Down Step2 NS/MWh - 243	
Bid Up Real Time Step1 Change Rate - 279	
Bid Up Real Time Step1 Limit - 277	
Bid Up Real Time Step1 NS/MWh - 278	
Bid Up Real Time, KWh - 352	
Bid Up Step1 Change Rate - 221	

Please note: The status list is Presented , once you set up the relevant Electric Company.



5. Status Value - statuses have a choice of several options. The Item returns a value of true if the status has the value of the selected option.

Calculation Formula Item	Х
Item Name	
Status	
Set to zero when no source defined	er
Item Type	
Status Value	~
Source	
Billing	~
Status	
Production Limitation Type - 312	~
Value	
Value	
Acceptance Tests	
Acceptance Tests Change Frequency	
Acceptance Tests Change Frequency Dispatcher Order	
Acceptance Tests Change Frequency Dispatcher Order Force Majeure Grid Failure	
Acceptance Tests Change Frequency Dispatcher Order Force Majeure Grid Failure INGL Error	
Acceptance Tests Change Frequency Dispatcher Order Force Majeure Grid Failure INGL Error No Limitation	
Acceptance Tests Change Frequency Dispatcher Order Force Majeure Grid Failure INGL Error No Limitation Planned Outage	
Acceptance Tests Change Frequency Dispatcher Order Force Majeure Grid Failure INGL Error No Limitation Planned Outage Responsibility	

6. Compare Limit – this is a set of values used to transform a result.

e.g. in the example below a value of 10 to 15 will be tranformed to 50. A value between 10 and 30 will be transformed to (50 + (100 - 50) * (value - 10) / (30 - 10))

Calculation Formula Item			х
Item Name			
New Item			
Set to zero when no source defined			
Item Type			
Compare Limit			~
Compare Limit			
Temperature Coefficier	ıt cycle open	closed	~
	Cancel	Add	

LowerLimit	UpperLimit	Value
	10	50
10	30	100
30	50	300
50	70	500
70	1000	700
100		1000

7. Calculation - using another formula's results as the base data.

Calculation Formula Item		Х
Item Name		
calculation		
Set to zero when no source define	ed	
Item Type		
Calculation		~
Calculation		
Daniel for accuma	lation - 68	~
	Cancel	Add

8. TOU Profile – the TOU Profiles list is based on the selected Electric Company.



+ Add I	Formula
Company Sum to Resolution	
PSE&G ∽ Days	✓
Calculation Formula Item	×
Item Name	
activeEnergy	
Set to zero when no source defined	
Item Type	
TOU Profiles	~
Usage Type	
Active Energy Import	~
TOU Profiles	
Working Days Summer	
Sat,Sun Summer	
Working Days Winter	
Sat,Sun Winter	
Silling \\ Administration \\ Companies \\ TOU Profiles	Show TOU Calendar + Add New Definition

Detail	s Season	Tariff	TOU Profiles	Price Lists	Calculation	Thresholds	Factors	Payment Progran	15
Compa	any: PSE&G					Usage Type: A	ctive Energy I	mport	~
ID	Name				Season				Action
1	Working Days Sun	nmer			Summer		Hours D	ays	Edit
2	Sat,Sun Summer				Summer		Hours D	ays	Edit
3	Working Days Win	ter			Winter		Hours D	ays	Edit
4	Sat,Sun Winter				Winter		Hours D	ays	Edit
* TOU	Profile can not be	deleted if I	lours / Days defined						

9. Prices - The prices list is based on the selected electric company.



This item is based on the price lists that were defined for the company.

Calculation Formula Item	>	K		
Item Name				
Prices	×			
Set to zero when no source defined				
Item Type		1		
Prices	~			
Price				
price list	~			
Items				
item 1	~			
Ca	ancel Add			
Billing \\ Administration \\ Companies \\ Price Lists				d New Definition
Details Season Tariff TOU Profiles	Price Lists Calculation	Thresholds Fa	ctors Payment Pr	ograms
Company: PSE&G				
ID Name				Action
138 price list			Items Prices Current Prices	Edit
* Price List can not be deleted if Items / Prices defined				

10. EPI- EPI (Energy Performance Indicators) data are additional data properties for customer / device. They can be used for the calculation.

Calculation Formula Item	X
Item Name	
EPI	
Set to zero when no source defined	
Hourly Production	
Heating Degree Days	
Cooling Degree Days	
Total Area	
Temperature	
Number of Rooms	
Number of Computers	
Weekly Hours of Occupancy	

11. Site – Selecting a site. The site can then be used to sum data for all the devices in the site.

After creating an item of type "Site", click on the Item to choose the source of the data. Clicking on the item will open a popup window. Click on "Add Source":

expert	oower™					Manager menu	Administration menu
Maintenance	Data Entry	Permissions	Events	Billing	Licens	se Mngmt.	System Settings
All Formulas							+ Add Formula
My new	teat	Formul	La. Iear Save		^{mpany} srael Elect	^{Resul} tric(❤ Da	It Resolution
Formula 🗶 - Fullscreen	Calcu Item N Situ Item I Sit	ation Formula Item Iame C Add Source ype C	Cance	X Delete Item	Other	Resolution	Available Functions
						Test	Save

Steps to set a data source for site item:

1. Select the customer

2. Select the device you want to associate with a source site. If the same definition is needed to all the customers' device, select "All..."

3. Select the site.

My New Test	Formula Duplicate	
General Customers activeEnergyImport X Site X + Add Item		
Calculation Formula Item	Sources	×
Item Name	Customer name	~
Add Source Set to zero when no source o	Device	~
Item Type	^{Site}	~
		Close

For Example: Make a summary of all the results that obtained with calculation 66 for each device in "site a"

import_minus	s_OverMaxConsumer_device X	import_me	lisron_total X s	um_all_consum	ers X
Export_ge2P	PlusGe3 X calc66 X + Add	Item			
Formula + -	Full Screen				
1 <mark>Su</mark>	umDevicesInSite	e(sum_	all_cons	sumers,	calc66)
	Calculation Formula Item			Х	
	Item Name			Delete Item	
	sum_all_consun	ners			
	Item Sources				
	Customer	Device	Source	Delete?	
	customer	All	site a	Х	
	Add Source				
	Set to zero when no source de	fined			
	Item Type				
	Site			~	
			Cancel	Save	

Adding a data source

Because the formulas are general formulas and can be used for different customers and different devices , the source of the data can be set for each customer / device.

The option to add source is possible for each Item, and it is optional.

If you do not enter the source, the source will be the device for which the invoice is being produced for.

Steps to set a data source:

- 1. Click on the Item
- 2. Click on "Add Source"
- 3. Select the customer

4. Select the device for which you will select the source. If you want the same source for the whole customer - select "All".

5. Select the device.

My N	ew Test	
activeEnergyIm	port X + Add Item	
	Calculation Formula Item	X
		Sources
	Item Name	Customer
	activeEnergyIm	customer name ~
	Add Source (Optional)	Device
	Set to zero when no source	All ~
		Source Device
	Usage	Select device ~
	Usage Type	Close
	Active Energy	Import ~
	Tariff	
	General	~
		Cancel Save

After entering the source, click on Add.

You can enter multiple sources at one time.

Calculation Formula Item			Х		
Item Name			Delete Item		
activeEnergyImp	oort				
Item Sources					
Customer Customer name	Devic All	GE2+GE3	Delete? X		
Add Source (Optional)		Sources			
Set to zero when no source de	fined	Customer			
Item Type		Customer nan	ne		`
Usage		Device			
Usage Type		All			
Active Energy In	npor	Source Device			
Tariff					·
General				Close	Add
L		Cancel	Save		

Set to Zero When no source defined

Use this option if you want the data to be retrieved only for devices for which you have defined a source. For other devices the data will be set to zero. This is in order to create a formula in which there are devices that have two sources and devices with a single source.

Calculation Formula Item		Х
		Delete Item
Item Name		
activeEnergyImport		
Add Source (Optional)		
Set to zero when no source defined		
Item Type		
Usage		~
Usage Type		
Active Energy Impor	rt	~
Tariff		
General		~
	Cancel	Save

3. The construction of the formula

Building formula is done using the following window:

expert	power™				Mana	ager menu Ac	dministration menu
Maintenance	Data Entry	Permissions	Events	Billing	License M	Ingmt. S	ystem Settings
All Formulas							+ Add Formula
My new	teat	Formul	ear Save	[ompany Israel Electric	Result Re C V Days	esolution V
Site X + Add Item	1				Other Re	esolution	Available Functions
						Test	Save

The formula is a script-like definition. The script is written using the various functions and objects that are available on the lists. As well as all the items that were added in the previous step.

Available Functions:

exper	tpower™				Manager menu	Administration menu
Maintenance	Data Entry	Permissions	Events	Billing	License Mngmt.	System Settings
All Formulas						+ Add Formula
My ne	w teat	Formul	ar Save	c [Israel Electric ()	ays
Formula + - Fullscr					Cther Resolution if (condition, true accum(item, accum resultResolution) min(a,b) min(expression,res max(a,b) max(expression,res sum(dataItem, reso resolution(dataIte	Available Functions ar, false) desolution, wolution) holution) holution) m, resolution) historical
					Iimit (expression, IsProfileActive (pr FirstExists(expl, Min0(expl) SumDevicesInSite(S	<pre>inflippe) iofile) exp2) iite, Expression)</pre>

Hovering over "Available functions" will display a window with the available functions.

Common commands:

The creation of **conditions**:

if (condition, on-true, on-false)

This function evaluates the condition if it evaluates to true it returns the "on true" expression otherwise it returns the "on false" expression.

For example: If the export less or equal to threshold 18 the result is item calc66 else the result is item sumcslc66

if (activeEnergyExport <= tr18,</pre>

calc66, SumCalc66)

Min0 (exp1)

if the result of the expression **exp1** is negative return 0. **For example**: The following expression will return 0.

Min0(-1)

SumDevicesInSite (Site, Expression)

Summarizes the value of **Expression** for all the devices in the chosen site.

For example:

SumDevicesInSite(site1, calc66)

accum (expression, accum Resolution, result Resolution)

This function returns the accumulated value of "**expression**" from the beginning of the period. The beginning of the period is defined by "**accum Resolution**". The "**result Resolution**" is the resolution of the results.

For example: Return the sum of "activeEnergy" from the beginning of the year for each month.

accum(activeEnergy, year, month)

min (a, b) / max (a, b)
Min / max between the two parameters.

For example: The next expression will return 1.

min(1,2)

min (expression, **resolution**) **/ max (**expression, **resolution**) Checking the minimum / maximum within a certain date range.

For example: Show me the maximum value of the item max demand over the last year

max(MaxDemand,year)

sum (dataItem, resolution)

Summarize data within the date range defined by the resolution. **For example:** Sum all data in item "deviation" for each month.

sum(Deviation, month)

First Exists (exp1, exp2)

Returns the value of the first expression which evaluates to a value that is not null (i.e. has data). For example: The next expression will return 1

FirstExists(null, null, 1)

Resolution:

The list of resolutions is : "half hour", "hour", "day", "month", "year", "range".



Other

For example: Accumulate values from the beginning of each year.

eneral 🗹			
vailability	X + Add Item		
ormula + -			
1 ac	ccum(availability,	year,	range)
	Calculation Formula Item)
	them blome		Delete Item
	availability		
	Add Source (Optional)		
	Set to zero when no source defined		
	Item Type		
	Calculation		~
	Calculation		
	73 - calculation		~
		Cancel	Save

Other: More options of expressions that can be used in the formula for calculation

expert	tpower™					Manager menu	Administratio	n menu
Maintenance	Data Entry	Permissions	Events	Billing	Licen	se Mngmt.	System Sett	ings
		New Formulas are add	ed to the list of I	Formulas only once	saved			
All Formulas							+ Add	Formula
Mr. Eas	- [Company	Resu	It Resolution	
My FOI	Illula				Company	✓ Da	ays	~
No calculation items.					_			
Formula + - Fullscree					Other	Resolution	Available Fu	nctions
1			and					
			or		_			
			dayOfMont	h				
			aayorweex	ity pariod start				
			Billing P	eriod				
			Contract	start				
			IEC_year					
			Min_perio	dical_start				
						Test	Sav	

For example: If any (one of the items) exist so give 1 if not 0

if(SF354UO or SF353PO or SF318PO,1,0)

4. After creating the formula, click Save

exper	tpower™						
Maintenance	Data Entry	Permissions	Events	Billing	Licens	Manager Menu se Mngmt.	Administration Menu System Settings
All Formulas			·				+ Add Formula
Test]		Duplicate			Company Company	Resu ✔ Da	t Resolution YS ✓
Formula + - Fullscre	en	-			Other	Resolution	Available Functions
	CIVELNET BY		,⊥,♥)				
					l	Test	Save

After saving, the "Test" button is enabled. This serves as a test tool to see the formula results in action.

5. Test

Clicking on testing opens the results window

expertpower™					Manager M	anu Admi	inistration Menu
Maintenance Data Entry	Permissions	Events	Billing	Lie	ense Mngmt.	Syst	em Settings
All Formulas				_			+ Add Formula
Test Formula	Results - 12:9:32			х		Result Resol	ution
activeEnergyImport x + Add Item	Test Device 11753-PM175-H	н	Test Dates 05/01/2015 - 06/01/201	5	у ~	Days	~
Formula 🖲 🕞 Fullscreen		Results				n Ava	ilable Functions
1 if(activeEnergy]	From	To Date	Value				
	05/01/2015 00:00:00	05/02/2015	0				
	05/02/2015	05/03/2015	0				
	05/03/2015	05/04/2015	0				
	05/04/2015	05/05/2015	0				
	05/05/2015	05/06/2015	0				
	05/06/2015	05/07/2015	0				
	05/07/2015	05/08/2015	0		Test		
	05/08/2015	05/09/2015	^	Ľ			
l	Total 31 Results						

Clicking on the name of the device opens a window that allows changing the tested device. Choosing a new device, and pressing the "Select" changes the selected device and the results are updated accordingly:

exper	tpower™						
Maintenance	Data Entry	Permissions	Events	Billing	Manager Men License Mngmt.	u Ao	Iministration Menu
All Formulas							+ Add Formula
ma at 1		Results - 12:9:32			X Re	sult Re	esolution
Test 1	Formula			Device Tree		Х	~
activeEnergyImport	X + Add Item	11753-PM175-H	н	Start typing customer, si	te or device	_	
Formula + - Fullscre			Regulta	Tech. Institute B.SI	h.	~	vailable Functions.
1 if(ac	tiveEnergyT	From		🛨 Telma Shefa Arad			
	civernei gyi	FIOM		+ Test Ebbets Field			
		05/01/2015	05/02/2015	Test Import Custon	ner		
		05/02/2015	05/03/2015	 Test virtual 			
		00:00:00	00:00:00	- Test_QA_8060			
		05/03/2015	05/04/2015	Bill_Test bracha			
		05/04/2015	05/05/2015	Shufersal			
		00:00:00	00:00:00	11297-PM295-11			
		05/05/2015 00:00:00	05/06/2015	11300-PM296-12			
		05/06/2015	05/07/2015	11743-EM132-83	i		
		00:00:00		11754-BFM136-0)4		
		05/07/2015	05/08/2015	11754-BFM136-0	5		Save
		05/08/2015	05/09/2015	11773-BFM136-0	3, ttt	•	
		Total 31 Results		1 selected			
		Fotor of Pressults		11297-PM295-11	Polost		
					Select		

Clicking on the "Test Dates" allows changing the tested date period:

expert	power™								W	Ma	nager	Menu	Adı	ninist	ration	Menu
Maintenance	Data Entry	Permissions	Events		E	Billing			Li	icense	Mngn	nt.	Sy	stem	Settir	ngs
All Formulas														+	Add F	Formula
Test E		Results - 12:9:32 Test Device 11753-PM175-H	н	T	est D 5/01/:	ates 2015 -	- 06/0	1/20	X 15	ny	~	Res D	ult Res ays	olution	1	~
Formula + - Fullscree	n		Re	esults					e	er F	Resolu	ition	A	vailabl	e Fun	ctions
1 if(act	iveEnergyI	From	To Date	9		Valu	е		\sim							
		05/01/2015 00:00:00	05/02/20 00:00: Da	15 ate / Time		^										Х
		05/02/2015 00:00:00	05/03/2 00:00:	< A		May	/- 2	015			<u>۸</u>		June	e - 2	015 -	• •
		05/03/2015 00:00:00	05/04/2 00:00:	Sun Mon	Tue	Wed	Thu 30	Fri 1	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
		05/04/2015	05/05/2	3 4	5	6	7	8	9	31	1	2	3	4	5	13
		05/05/2015	05/06/2	10 11	12	13			16	14	15	16	17	18	19	20
		00:00:00	00:00: 05/07/2	24 25	26		21	22 29	30	21	22	23	24	25	26	27
		00:00:00	00:00:	31 1	2	3	4	5	6	28	29	30	1	2	3	4
		05/08/2015	05/09/20	15 _		U			v	_						
		Total 31 Results														

Control Refresh - To refresh the test results after making some changes.



You can export the results of the Test Excel file



Clicking on "A<u>ll Formulas</u>" displays the list of all available formulas with the number of formula.

expert	tpower™					Manager menu	Administration men
Maintenance	Data Entry	Permissions	Events	Billing	Licens	e Mngmt.	System Settings
		New Formulas are a	added to the list o	f Formulas only once	saved		
All Formulas							+ Add Formu
Mrs. Ees					Company	Sum t	o Resolution
MY FOI	rmula				Select	∽ Da	ys V
No calculation items							
Formula + - Full Scre					Other	Resolution	Available Functions
1							
						Test	Save

You can search for a formula exists, by using the "Search"

expertpowe	er™					Manager menu /	Administration menu
Maintenance Data Entr	ry	Permissions	Events	Billing	Licen	se Mngmt.	System Settings
	Ν	lew Formulas are	added to the list of	Formulas only once	saved		
							+ Add Formula
Search					Company	Sum to	Resolution
107 min in a week	х 🔨				Select	- 🗸 Day	s 🗸
74 My Formula	х						
85 My Formula1	x				Other	Resolution	Available Eurotions
86 My Formula2	х				Other	14630101011	Available Functions
71 My Formula3	X						
90 My new teat Formula	х						
106 My New Test Formula	х						
72 Name My Formula	х						
99 Power factor	X						
44 status 12	х						
101 SumDevicesInSite calc63	X						
100 SumDevicesInSite Calc66	X						
51 test accumalator	x						
87 Test Formula	x Y						
	Close					Test	Save

To Add a new formula click on "Add formula".

expert	power™				Ma	nager menu 4	dministration menu
Maintenance	Data Entry	Permissions	Events	Billing	License	Mngmt.	System Settings
		New Formulas are a	dded to the list of	Formulas only once	saved		
All Formulas							+ Add Formula
My For No calculation items.	cmula				^{Company} Select	Sum to	Resolution
Formula + - Full Scre					Other I	Resolution	Available Functions
1							
						Test	Save

Duplicate a Formula

You can duplicate an existing formula, by clicking on Duplicate. When clicked, a new identical formula is created.

expert	oower™				M	lanager Menu	Administration Menu
Maintenance	Data Entry	Permissions	Events	Billing	License	e Mngmt.	System Settings
All Formulas							+ Add Formula
Test F	ormula	Duplicate			Company Company	Resul	t Resolution ys V
Formula + - Fullscreen					Other	Resolution	Available Functions
1 if(act	iveEnergy]	[mport>1000	9,1,0)				
						Test	Save

Full Screen

You can click on full screen, to switch into full screen mode.

exper	tpower™					Manager Menu /	Administration Menu
Maintenance	Data Entry	Permissions	Events	Billing	Licens	se Mngmt.	System Settings
All Formulas							+ Add Formula
Test	Formula x + Add Item	Duplicate			Company Company	∼ Day	Resolution S
Formula + - Fullscr	een ctiveEnergy]	Import>1000	9.1.0)		Other	Resolution	Available Functions
	8,						
						Test	Save

To return to normal screen mode, click on "Exit full screen"

	Exit Fullscreen
if(activeEnergyImport>1000,1,0)	

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