

How to set up a new inverter

REFUsol 100K REFUstore 50/88K

by using REFUset Desktop via Ethernet connection



SO

ENER



Download REFUset and get Firmware package

Visit our website: <u>www.refu.com</u> and in the download area you can find REFUset configuration tool:

https://www.refu.com/en/downloads/

Download the setup file and install it in your computer.

Also download Firmware version for REFUsol 100K / REFUstore 50K/88K. It is a zip file. Extract the file to your PC.

Firmware and Files

Instructions and Software

- Instructions for inverter update
- Tool REFUset
- Instructions for setting up inverters with REFUset app_ English
- Instructions for setting up inverters with REFUset app_ Greek
- Instructions for setting Ethernet in REFUset app_English
- Instructions for setting Ethernet in REFUset app_Greek

Firmware

- Firmware V. 300-01-10-12-S for REFUsol 13-46K
- Firmware V. 310-01-03-40-S for REFUsol 100K and REFUstore 88K

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Install REFUset and connect to inverter

Once installation is complete, connect your PC to inverter by using an Ethernet cable.

Then double click the icon in order to launch REFUset



Connection window opens:

- > Select the IP Address of the Inverter that you want to connect to
- Click "Ok" icon

Note: PC and Inverter must be under the same Local Network Check Network Connections → Ethernet → Internet Protocol Version 4 (TCP/IPv4) Factory default IP address of inverter is 192.168.130.30

REFUset		×
Connect method Sta	tic 🔹	
Interface		
Ethernet		
IP address	192 . 168 . 130 . 30	
Host name		
TCP port	21063 🗘	
COM		
Port	COM3 - Standard Serial over Blu 💌	
Protocol		
USS address	0	
	Ok Cance	el

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Set Country and Nominal grid voltage

Once your PC is connected a window will pop up in order to select the Country and the Nominal grid voltage.

Please select carefully the voltage from the drop down menu.

Inverter will save these settings and reboot.

Refe Configuration Extras Help Static dia Everter type BET/biol 1007 Finner apackage version: 30 du/biol.75 Statistic Subplicition Markenser Subscription Nominal frequency: Markenser Markenser Subscription Subscription Subscription Subscrestrel Mark<	REFUset				- D 1	×	
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Feed-in contained Minimum voltage: Country Maximum voltage after grid fault: Nominal grid voltage: Maximum requency: Hz Maximum frequency: Hz Connection time © \$ Connection time after grid fault © \$ Satus: Connected on 192.168.130.302.1063	Feed-in conditions Power settings	Reactive Power Permanent Power	r Limitation Power r	eduction			
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Minimum frequency after grid fault:	Maximum frequency:	Hz	0 V				
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Status: Connected on 192.168.130.30:21063			N	ominal arid voltage	4001/ / 2201/	~	
Hz Hz Hz Save Save Save	Status: Connected on 192.168.130.30:21063			ionniar grid voltage	4000 / 2300		
Hz Hz Save					Save	Cancel	
Hz Arr Hz Save			-	Hz	к		
Hz Save				A Hz			
Save			-				
Save				v Hz			
Save							Cause
Reported							Rebooting.

Check FW version

Once you connect again, in the upper left box, you can see all inverter details. In case the Firmware package version is older than the one you downloaded from REFU's site, you have to update inverter.

e.g.

The actual FW version is 310-01-01-17-S. On site there is a new version (310-01-03-40-S) So a FW update is recommended.

Firmware

Firmware V. 300-01-10-12-S for REFUsol 13-46K
Firmware V. 310-01-03-40-S for REFUsol 100K and REFUstore 88K

REFUset

Static data		Live data	AC	~		
Inverter type: REFUsol 100K						
Firmware package version:	310-01-01-17-5	Active por	wer: 0 W	Reactive	power: 0 W	
Serial number:	320000019	Current L1	l: 0.0 A	Voltage	L1: 0 V	
MAC address	Caddresse 502DF4165D07 http://www.setting: Greece-Continent		Current L2: 0.0 A		L2: 0 V	
Country setting:			3: 0.0 A	Voltage	L3: 0 V	
Nominal voltage:	398 V					
Nominal frequency: 50 Hz						
Actual frequency monitoring Phase		se-to-phase	voltage monitoring	Α	Average voltage mo	
Feed-in conditions	Power settings	Reactive Power		Permanent Power Limita		
Feed-in conditions		292				
Minimum voltage:		80 🜩 9	%			
Maximum voltage:		120 🜲	%			
Minimum voltage after grid fault:		80 🗢	16			
	Maximum voltage after grid fault:					
Maximum voltage after grid fa	ault:	120 🗢 🤋	%			



Update FW version

Go to Extras \rightarrow Firmware Update Select the FW package you downloaded.

Click on Update button.

A message will appear informing you that you should not update inverter if time is close to sunset. Click on "Update" again.





Update FW version

Update has two stages:

- > Uploading new Firmware from PC to inverter
- Inverter is updating (burn)

Firmware version 310-01-01-17-S New firmware version 310-01-03-40-S Firmware package file C:\Users\kostas.kontogiannis\Documents\REFUsol_Tools\ r grid file Update progress Update status Uploading Firmware Package			a second
New firmware version 310-01-03-40-5 Firmware package file C:\Users\kostas.kontogiannis\Documents\REFUsol_Tools\ r grid fa Update progress Uploading Firmware Package	Firmware version	310-01-01-17-S	vo
r grid fe Update progress Update group file Upda	New firmware version	310-01-03-40-5	
r grid fa Update progress 42% 42%	Firmware package file	C:\Users\kostas.kontogiannis\Documents\REFUsol_Tools\ Browse	
Uploading Firmware Package	grid fa	42%	
Stop Lindste	r grid fl	Uploading Firmware Package Stop Update	
Stop Update		Stop Update	

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Once update is over, a message will appear

The second s	50 Hz						11-
onitorin	Firmware Update	e				×	Power rec
	Firmware version	310-01-0	1-17-S				voltage mo
	New firmware version	n 310-01-0	3-40-S				
	Firmware package file	e C:\Users	\kostas.kontogi	annis\Documents\REFI	Usol_Tools\	Browse	
er grid fa	Update progress			5%			
er grid f	update status	Burn ne	w firmware. Dor	"t switch off device!			
						Stop Update	
	+5.00 🗭 Hz						,
	+	and the second se					
ifter grid t	iault: -	5.00 🜩 Hz					



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Check new FW version

In the upper left window, you can see the new FW version.

Your inverter is ready for operation.

REFUset							
File Configuration Ex	tras Help						
Static data			Live data	AC	~	~	
Inverter type:	REFU	sol 100K					
Firmware package version: 310-01-03-40-5			Active pov	Read	tive po		
Serial number: 320000019		Current L1: 0.0 A		Voltage L1:			
MAC address: 502DF4165D07 Country setting: Greece-Continent		Current L2	Voltage L2				
		Current L3	Volta	ige L3:			
Nominal voltage:		ov					
Nominal frequency:		50 Hz					
Actual frequency monito	oring	Phas	e-to-phase	voltage monitoring	,	Ave	
Feed-in conditions	ed-in conditions Power setting		Re	active Power	Perm	anent	
Feed-in conditions			1.000		100000		
Minimum voltage:			80 🗢 🤊	6			
Maximum voltage:		120 🜩 %					
Minimum voltage after grid fault:			80 🗢 🤊	6			
Maximum voltage after gri	d fault:		120 🗢 🤊	6			
Minimum fraguencia			-5 00 A	47			



