



IMPORT/EXPORT AES KEYS PROCEDURE PROCEDURA IMPORTAZIONE/ESPORTAZIONE CHIAVI CRIPTATURA AES



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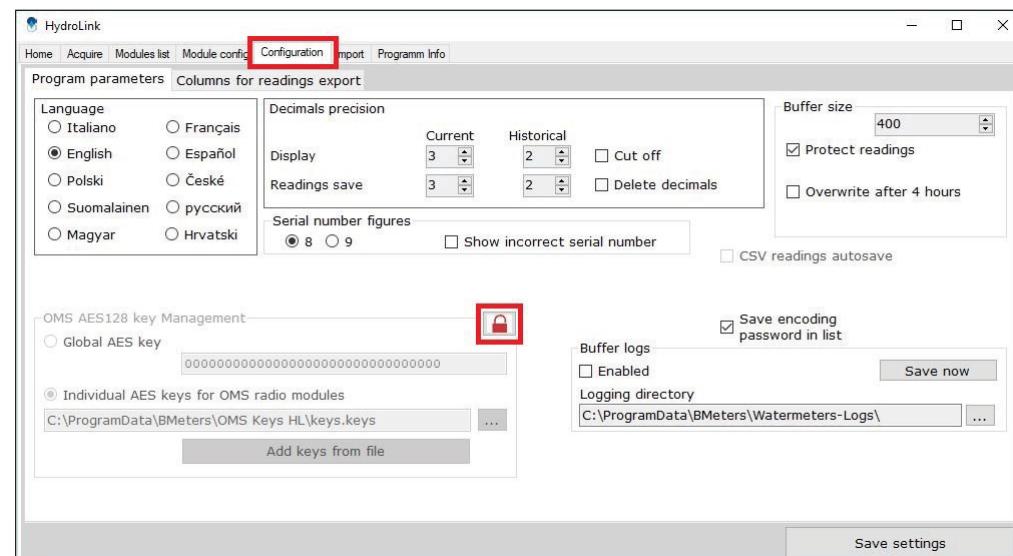
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1 HYDROLINK – HYDROCAL – HYDROCLIMA

1.1 Importation

The following manual is valid for all the software above mentioned.

- 1) Open the software you need to use for the measurements.
- 2) Navigate to the tab "Configuration" and press the "Red Lock" button.



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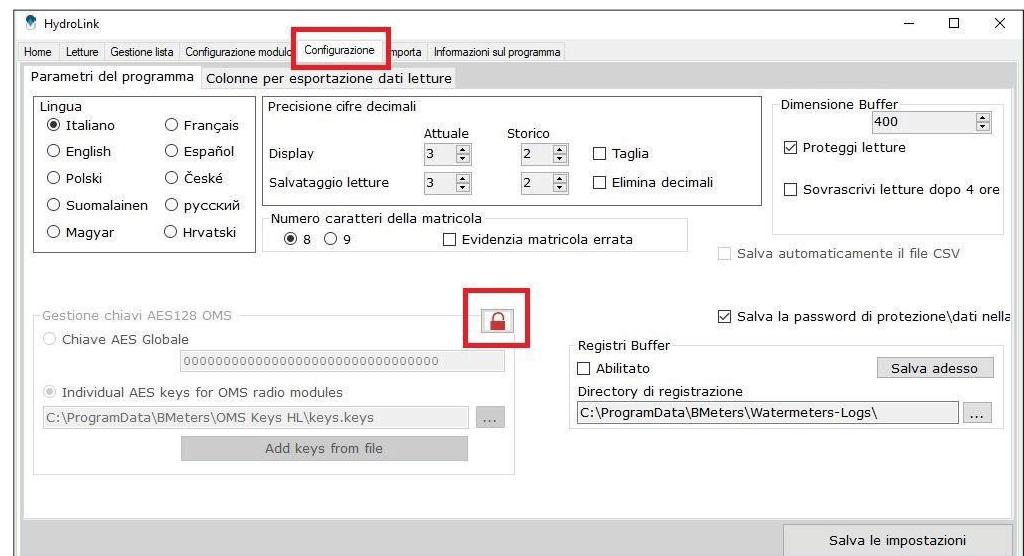
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1 HYDROLINK – HYDROCAL – HYDROCLIMA

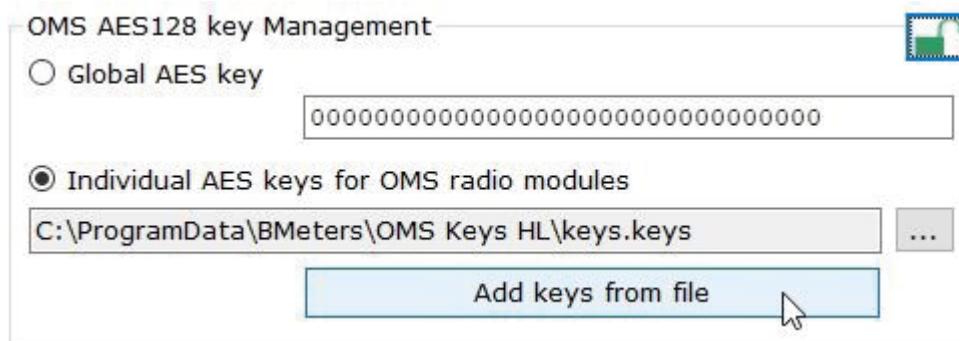
1.1 Importazione

La seguente procedura è valida per tutti software sopracitati.

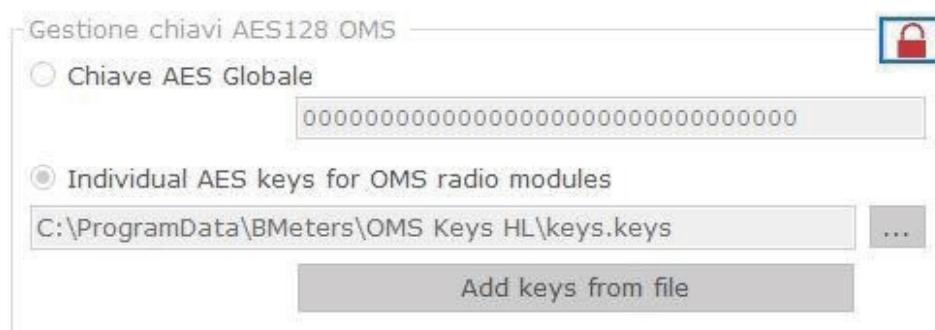
- 1) Aprire il software corrispondente alle letture che si vogliono effettuare.
- 2) Scorrere fino alla tab "Configurazione" e premere sul simbolo raffigurante il lucchetto rosso.



- 3) Accept the settings modification by pressing "Yes".
 4) In the next window press the button "Add keys from file" and select the file with the AES individual Encryption keys.



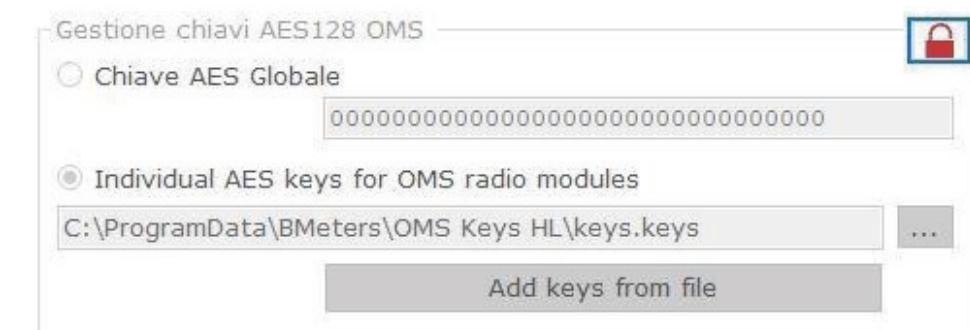
- 5) Once you have uploaded the Keys press the "Green Lock" to conclude the importation process (**Note:** At the end of the process you will see the lock turning red again).



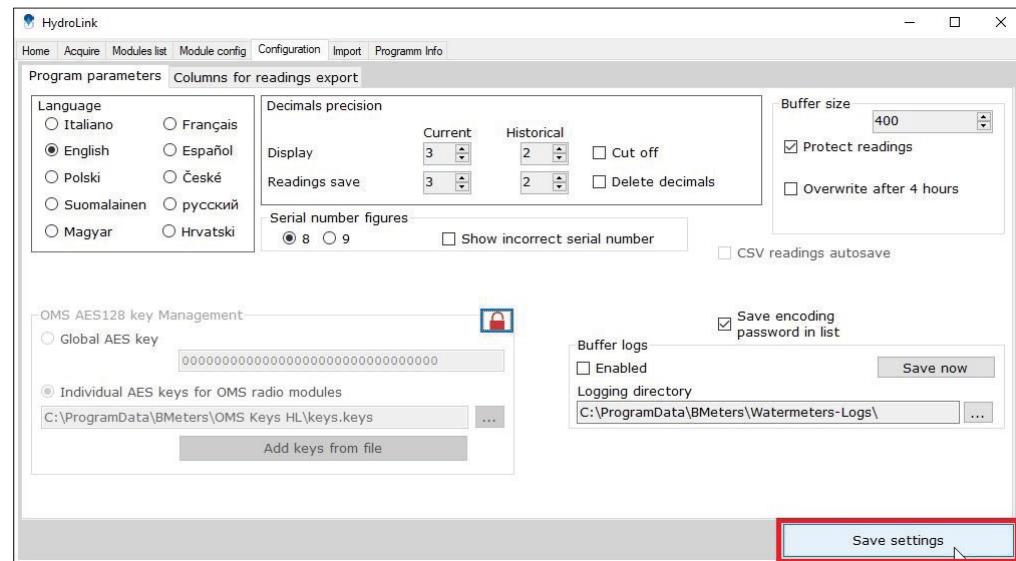
- 3) Accettare la modifica delle impostazioni cliccando su "Si"
 4) Nella schermata successiva premere sul pulsante "Add keys from file" e selezionare il file contenente le chiavi di Criptatura AES individuali.



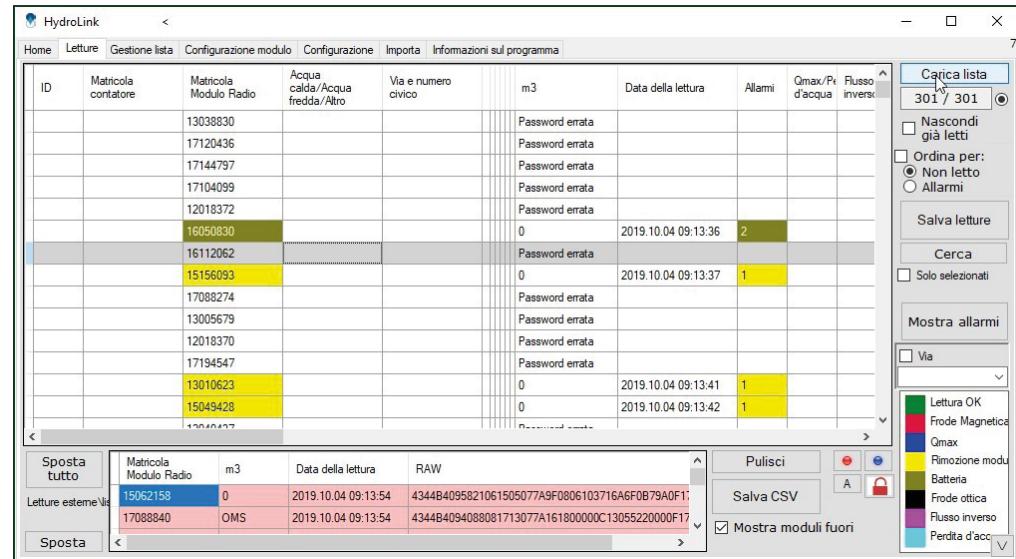
- 5) Una volta caricate le chiavi premere nuovamente sul simbolo raffigurante il lucchetto verde (N.B.: per concludere la procedura di importazione verrà visualizzato di nuovo il lucchetto rosso).



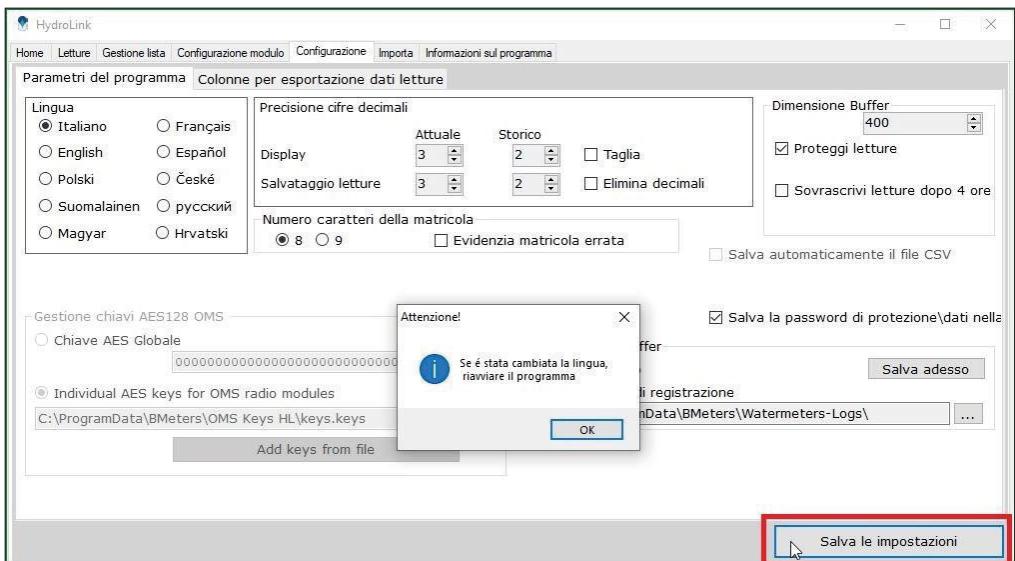
6) Press on the “Save Settings” button in the bottom right corner of the window and press “Ok” in the new window (**Note:** You should not restart the program unless you’ve changed the language).



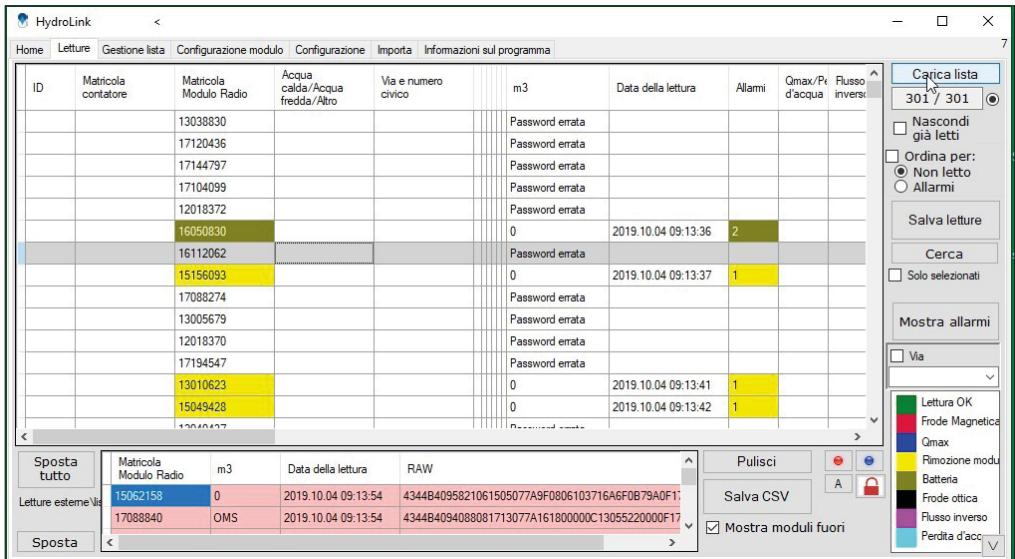
7) In the following image is possible to check the readings are still encrypted before the keys importation.



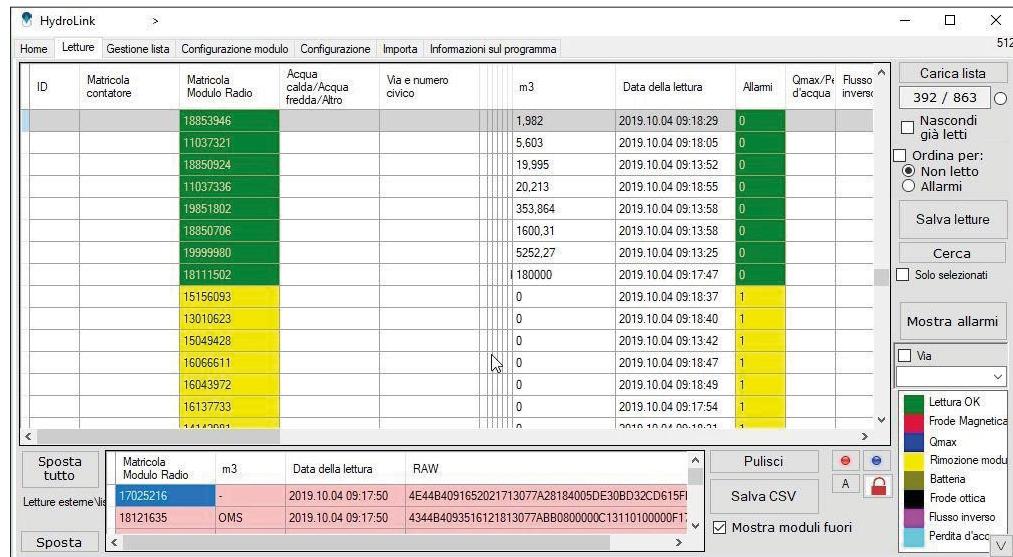
6) Premere sul pulsante ***“Salva le impostazioni”*** presente nella parte in basso a destra e premere ***“Ok”*** nella finestra che compare (N.B.: Non è necessario il riavvio del programma).



7) Nella seguente immagine è possibile notare che le letture sono criptate prima della importazione delle chiavi.



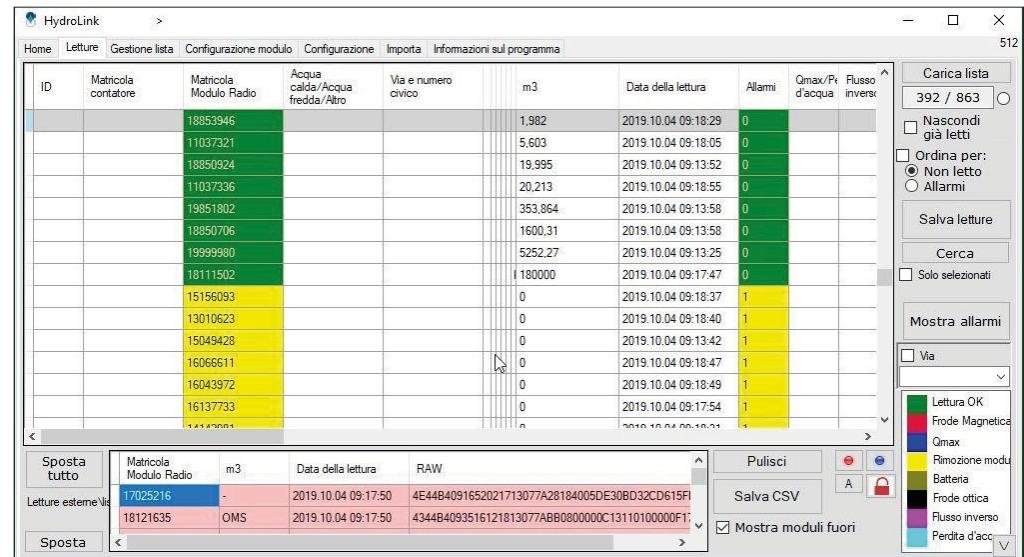
8) Upload the list to have all the clear values.



The screenshot shows a software window titled "HydroLink". The main area displays a table of data with columns: ID, Matricola contatore, Matricola Modulo Radio, Acqua calda/Acqua fredda/Altro, Via e numero civico, m3, Data della lettura, Allarmi, Qmax/Pi d'acqua, Flusso inverso. A sidebar on the right contains buttons for "Carica lista" (392 / 863), "Salva lettura", "Cerca", "Mostra alarmi", and a legend for reading status. At the bottom, there's a summary table with columns: Sposta tutto, Matricola Modulo Radio, m3, Data della lettura, RAW, Pulisci, Salva CSV, and a checkbox for Mostra moduli fuori.

Note: If there are warnings about the encrypted readings you must use a global AES key or reconfigure all the devices.

8) Caricare la lista per visualizzare le letture in chiaro.

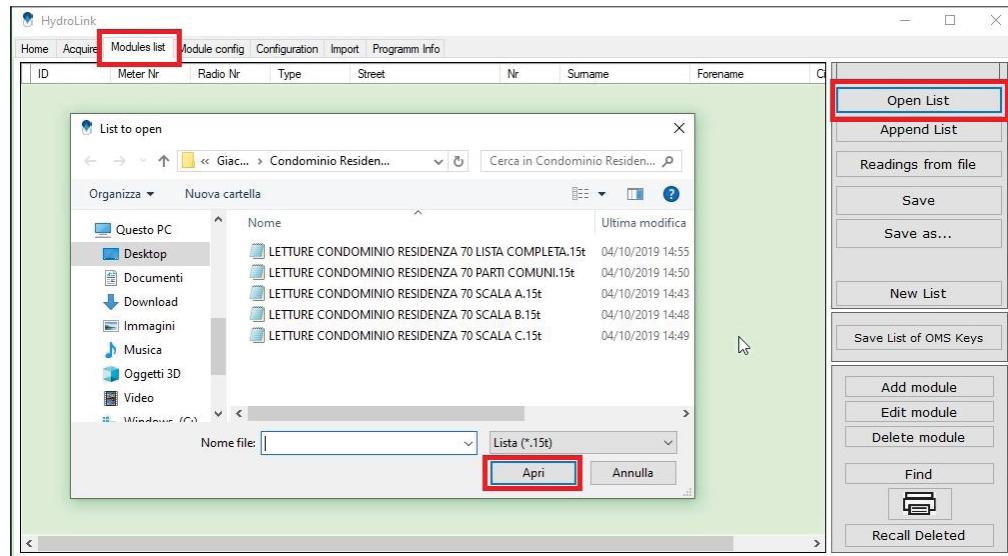


This screenshot shows the same software interface as the first one, but the data values are now displayed in black text across the entire table, indicating they are no longer encrypted.

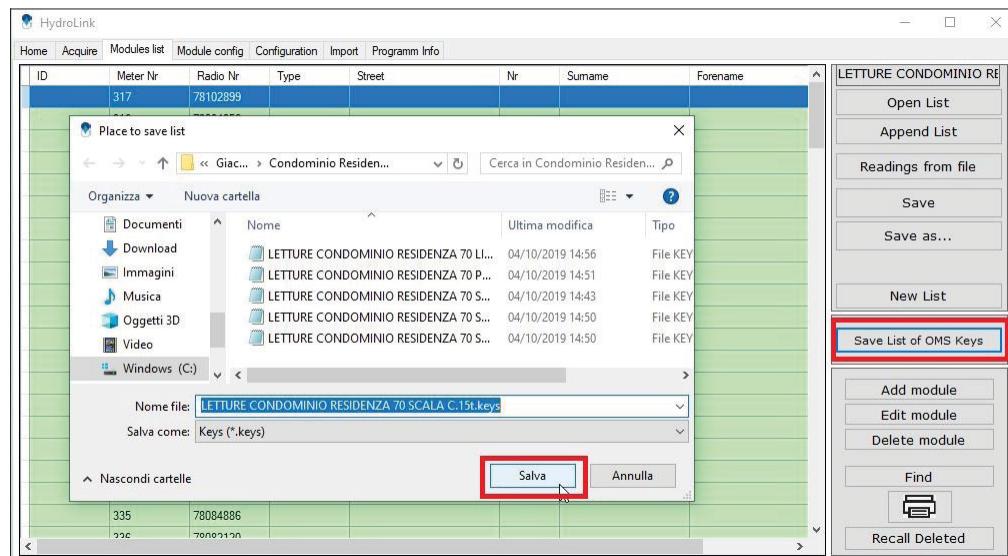
N.B.: Se vengono visualizzati nuovamente avvisi inerenti a letture criptate è necessario utilizzare una chiave AES globale o riconfigurare i dispositivi.

1.2 Exportation

- 1) Open the software you want to use for the exportation.
- 2) Navigate to the tab "Modules List", press on the "Open List" function and select the list to convert.

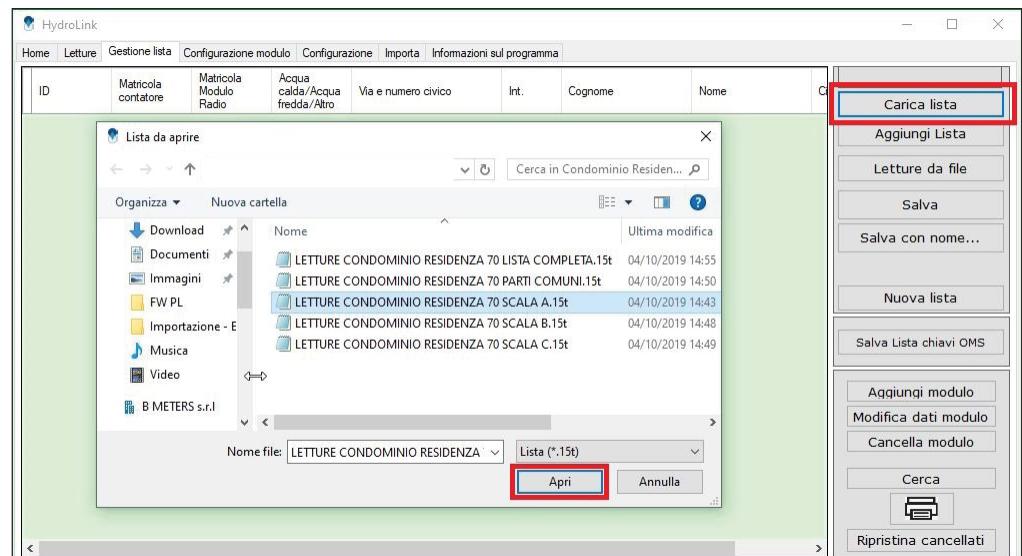


- 3) Press the "Save list of OMS keys" function, select the destination folder and press "Save".

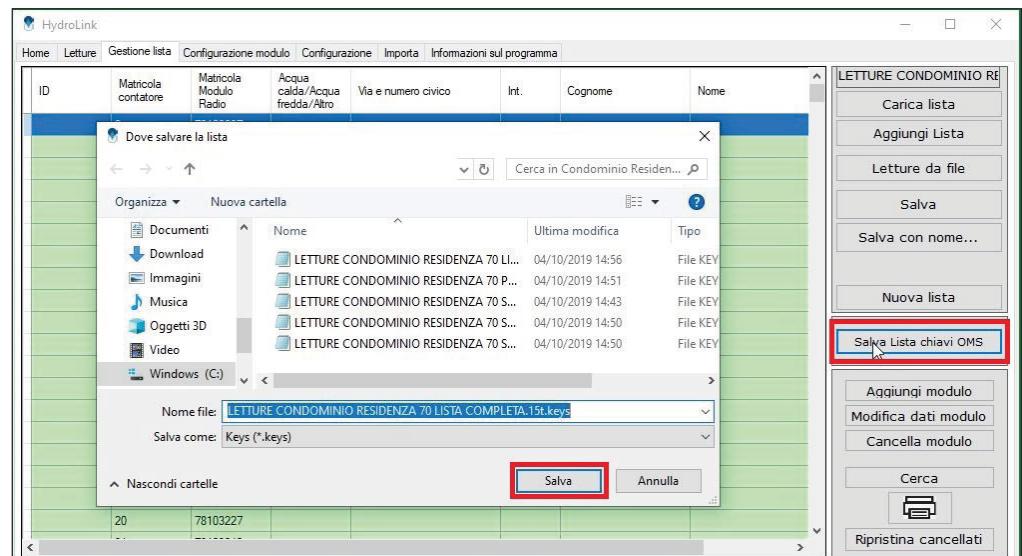


1.2 Esportazione

- 1) Aprire il software che vuoi utilizzare per l'esportazione.
- 2) Scorrere fino al tab "Gestione Lista", premere sul pulsante "Carica Lista" e selezionare la lista da convertire.



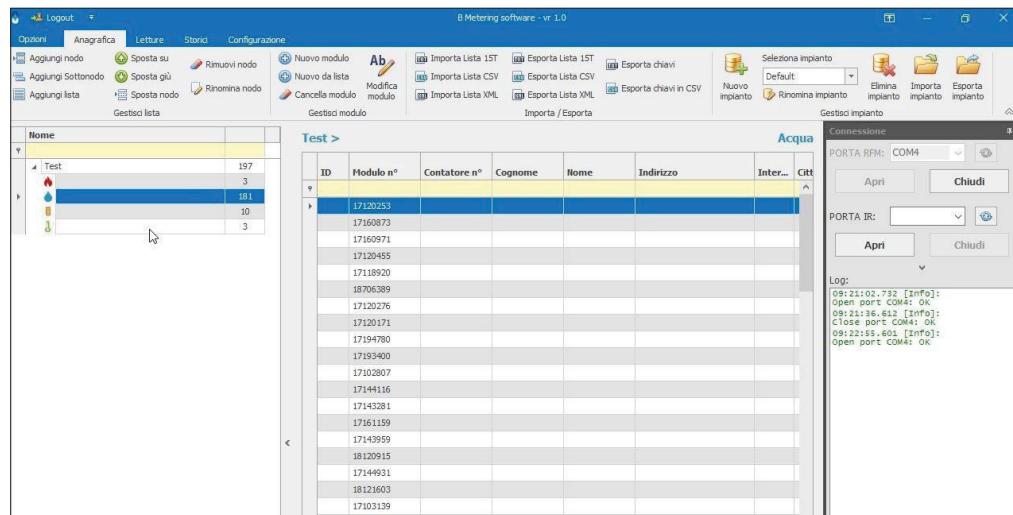
- 3) Premere sul pulsante "Salva lista chiavi OMS", selezionare la cartella di destinazione e premere "Salva".



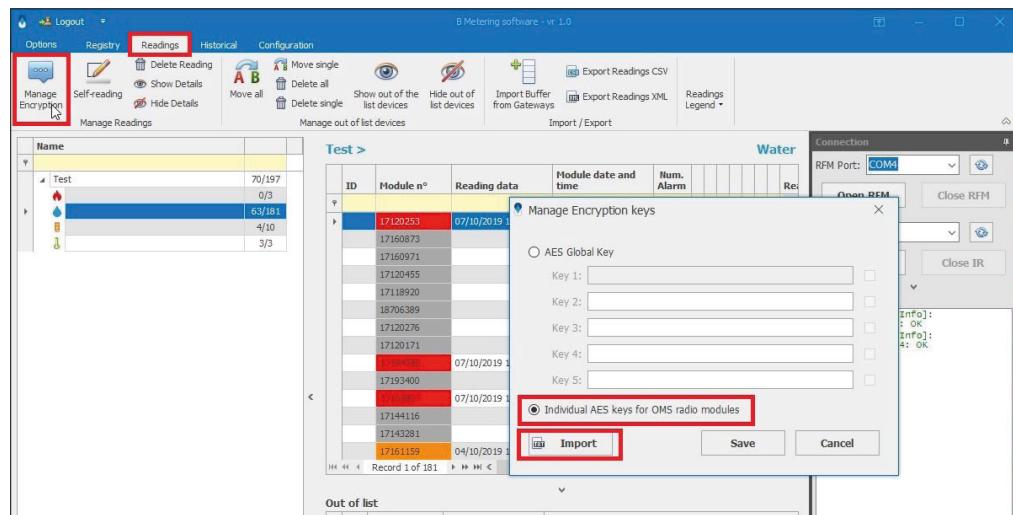
2. BMETERING

2.1 Importation

1) Open Bmetering software and select the list you need to read.



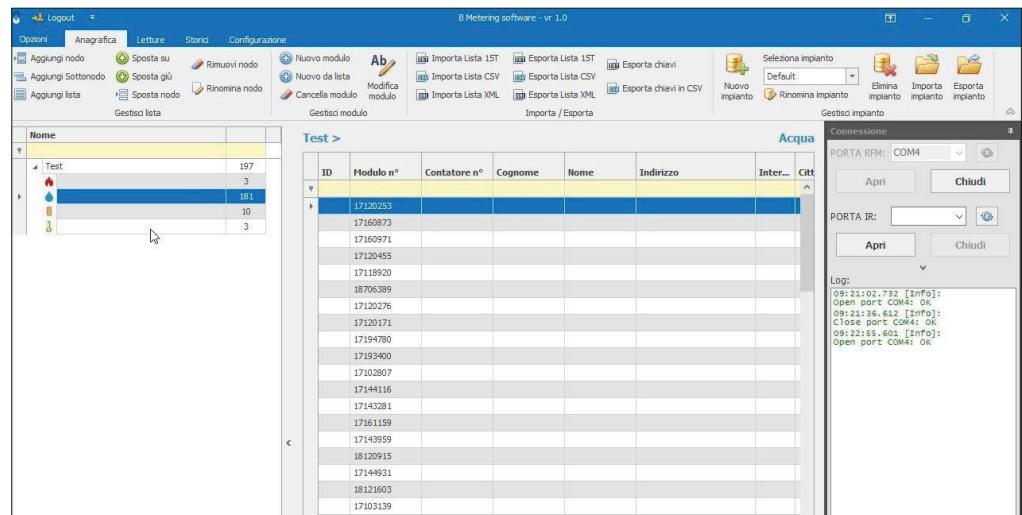
2) Switch to the “Readings” tab, press the “Manage Encryption” function (you can find it on the top left corner). Select “AES individual keys for OMS radio modules” on the new window and press the “Import” button.



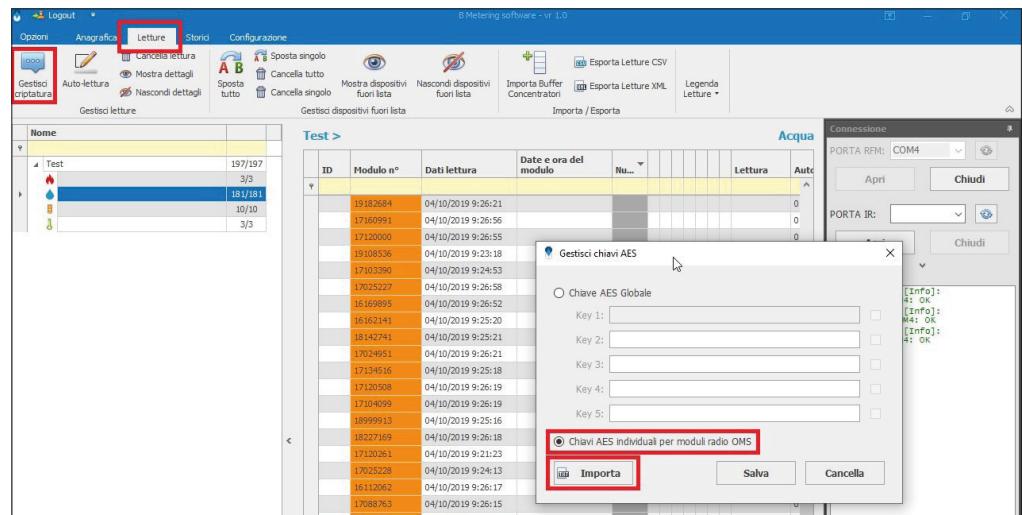
2. BMETERING

2.1 Importazione

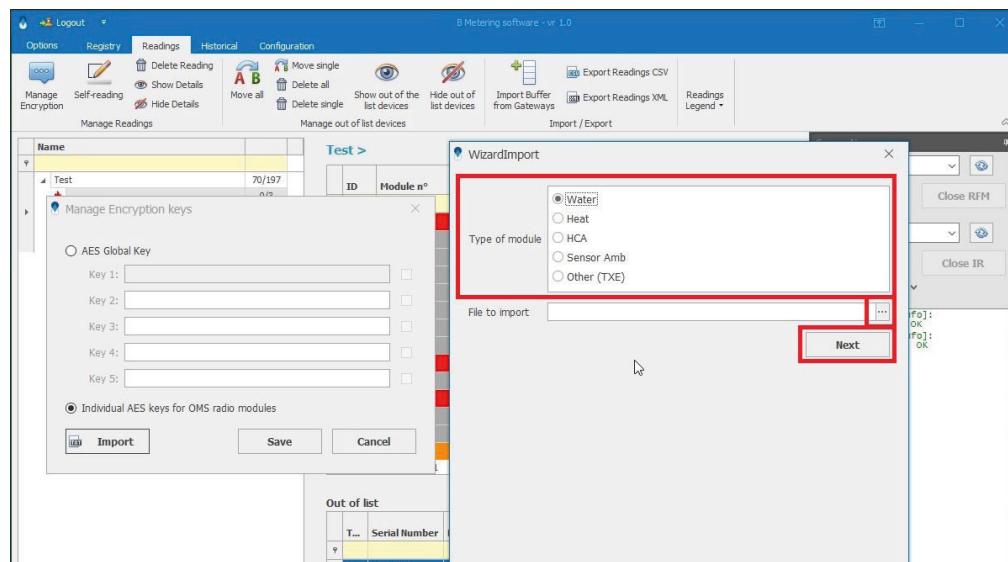
1) Aprire il software Bmetering e selezionare il nodo in cui devono essere eseguite le letture.



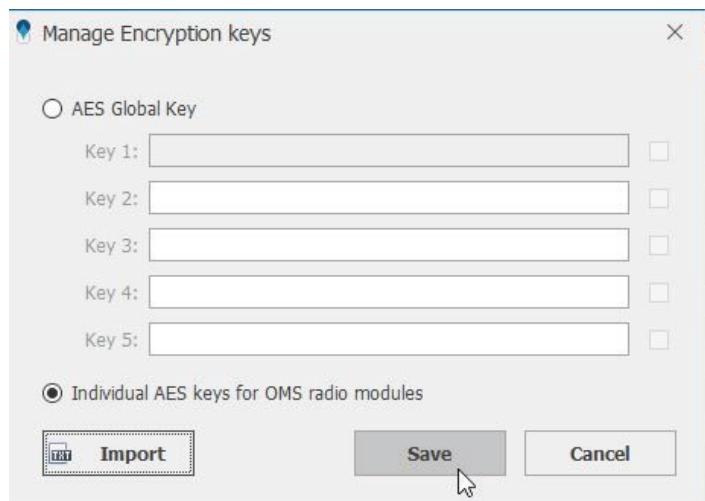
2) Spostarsi nella tab “Lettura”, premere la funzione “Gestisci Criptatura” presente in alto a sinistra. Nella schermata che compare selezionare “Chiavi AES individuali per moduli radio OMS” e premere sul pulsante “Importa”.



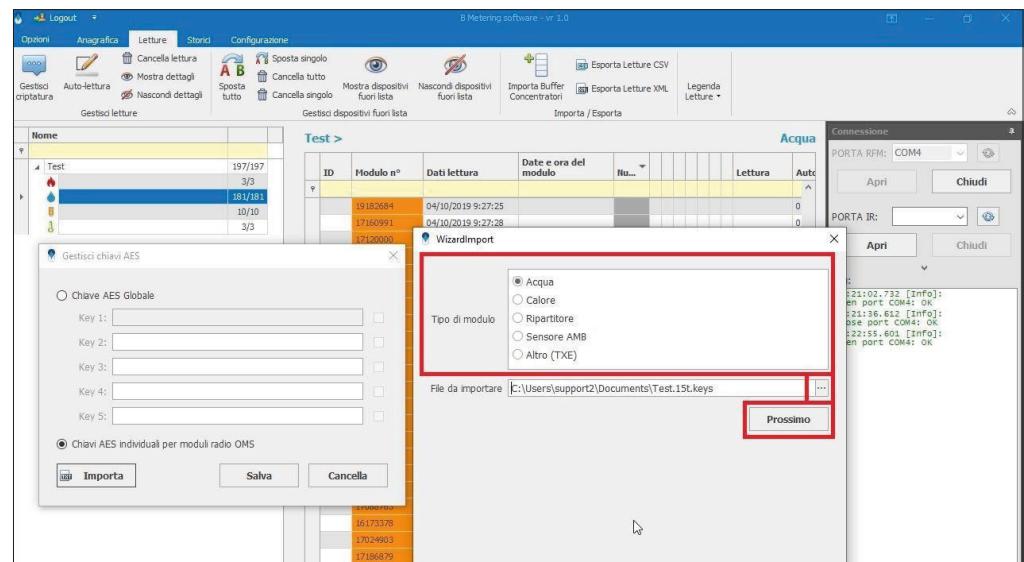
3) Select the module type in the new window, press the “...” button, select the encryption keys file with “.15t.keys” extension and press the “Next” button.



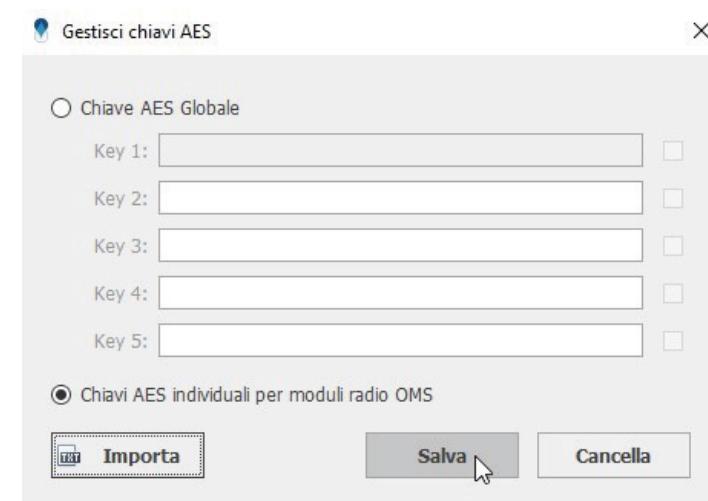
4) Integrate the encrypting Keys with “Save” button.



3) Nella schermata successiva selezionare il tipo di modulo definito in base alle letture necessarie, premere sul pulsante “...” per selezionare le chiavi di criptatura con estensione “.15t.keys” e premere il pulsante “Prossimo”.



4) Integrare le chiavi di crittografia tramite il pulsante “Salva”.



5) After a short waiting you will be able to see a window containing all the clear readings.

ID	Modulo n°	Data lettura	Date e ora del modulo	Numero	Lettura	Aut.
		04/10/2019 9:28:42		1	648,317	0
		04/10/2019 9:28:51		1	30,92	0
		04/10/2019 9:28:17		1	145,461	0
		04/10/2019 9:28:51		1	87,8	0
		04/10/2019 9:27:44		1	502,063	0
		04/10/2019 9:27:15		1	355,183	0
		04/10/2019 9:26:42		1	516,537	0
		04/10/2019 9:28:17		1	22,592	0
		04/10/2019 9:27:12	04/10/2019 08:34:00	1	159,53	0
		04/10/2019 9:28:45		1	0,7	0
		04/10/2019 9:28:45		1	3,407	0
17120253		04/10/2019 9:28:45		1	549,267	0
		04/10/2019 9:28:35	05/08/2019 06:30:00		0 m3	0
		04/10/2019 9:28:46	04/10/2019 09:29:00		0,005 m3	0
		04/10/2019 9:28:27	04/10/2019 09:29:00		4,501	0
		04/10/2019 9:28:16	04/10/2019 09:27:00		19,995 m3	0
		04/10/2019 9:28:25	04/10/2019 09:29:00		353,864 m3	0
		04/10/2019 9:27:25				

Note: If there are warnings about the encrypted readings you must use a global AES key or reconfigure all the devices.

5) Dopo un breve caricamento delle chiavi sopracitate comparirà una schermata contenente tutte le letture in chiaro.

ID	Modulo n°	Data lettura	Date e ora del modulo	Numero	Lettura	Aut.
		04/10/2019 9:28:42		1	648,317	0
		04/10/2019 9:28:51		1	30,92	0
		04/10/2019 9:28:17		1	145,461	0
		04/10/2019 9:28:51		1	87,8	0
		04/10/2019 9:27:44		1	502,063	0
		04/10/2019 9:27:15		1	355,183	0
		04/10/2019 9:26:42		1	516,537	0
		04/10/2019 9:28:17		1	22,592	0
		04/10/2019 9:27:12	04/10/2019 08:34:00	1	159,53	0
		04/10/2019 9:28:45		1	0,7	0
		04/10/2019 9:28:45		1	3,407	0
17120253		04/10/2019 9:28:45		1	549,267	0
		04/10/2019 9:28:35	05/08/2019 06:30:00		0 m3	0
		04/10/2019 9:28:46	04/10/2019 09:29:00		0,005 m3	0
		04/10/2019 9:28:27	04/10/2019 09:29:00		4,501	0
		04/10/2019 9:28:16	04/10/2019 09:27:00		19,995 m3	0
		04/10/2019 9:28:25	04/10/2019 09:29:00		353,864 m3	0
		04/10/2019 9:27:25				

N.B.: Se vengono visualizzati nuovamente avvisi inerenti a letture criptate è necessario utilizzare una chiave AES globale o riconfigurare i dispositivi.

2.2 Exportation

- 1) Open Bmetering software and select the list with the encrypted keys you want to export.
- 2) Navigate to the tab "Registry" and use the "Export Keys" function.

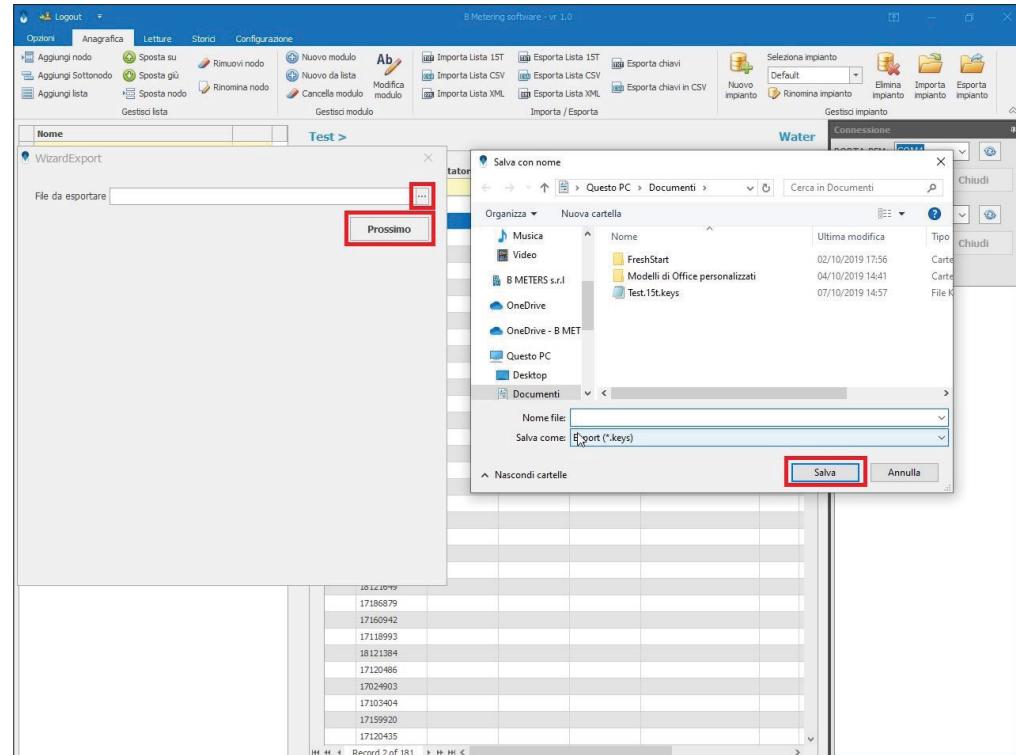
Name	ID	Module n°	Meter n°	Surname	Name	Street Address	Flat	City	Connessione
									RFM Port: COM4
									Open RFM
									Close RFM
									IR Port:
									Open IR
									Close IR
									Log:

2.2 Esportazione

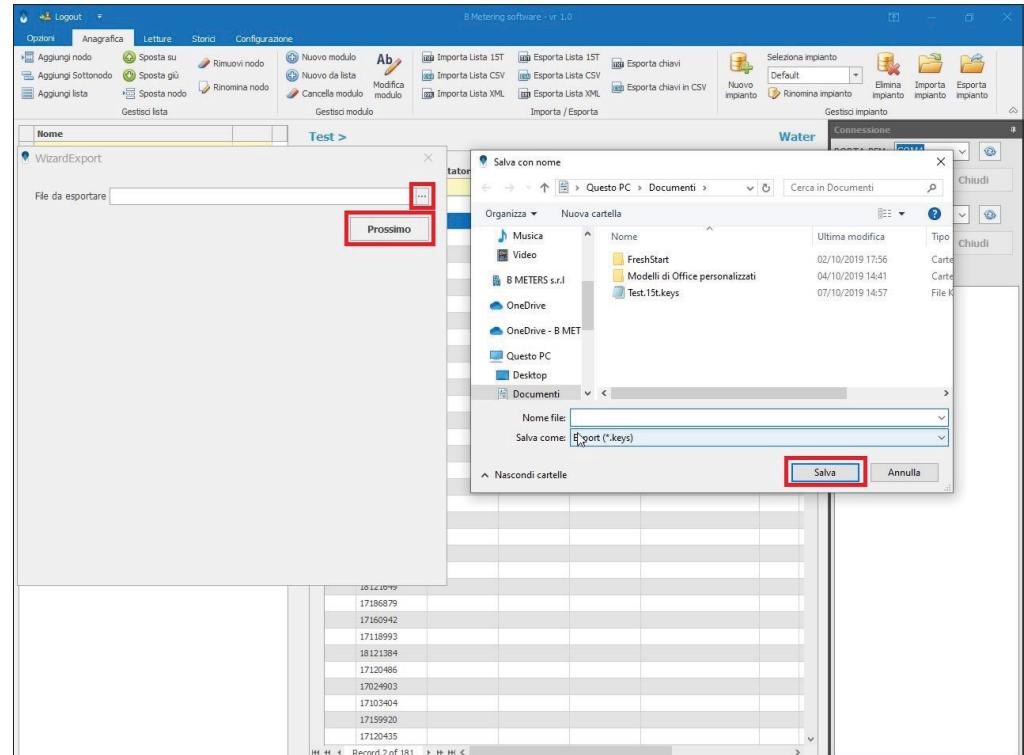
- 1) Aprire il software Bmetering e selezionare la lista in cui devono essere eseguite le letture.
- 2) Andare nella tab "Anagrafica" e premere sul pulsante "Esporta chiavi".

Nome	ID	Modulo n°	Contatore n°	Cognome	Nome	Indirizzo	Inter.	Citt.	Connessione
									PORTA RFM: COM4
									Apri
									Chiudi
									Log:

3) Press the “...” button to choose the destination folder, press on the “Save” button and then press on the “Next” button to conclude the process.



3) Premere sul pulsante “...” per selezionare la destinazione di salvataggio delle chiavi, premere su “Salva” e premere su “Prossimo”.



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