

Application Software Manual FL9Y-B1898

FL1F App V3.0

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1 FL1F App for FL1F

1.1 Overview of functions

Using the free of charge FL1F App enables you to update the current process values of your FL1F application with your smart phone or tablet PC via WLAN or Internet. This allows for switching digital signals as well as changing analog setpoint values. Calling up diagnostic values is also possible via the FL1F App.

Your FL1F App enables you ...

FL1F

← Create Connection

FL1F

Name

FL1F Test PLC

IP Address / Hostname

192.168.11.15

Username

App User

Password

●●●●

... to configure connections to more than one FL1F

For each FL1F connection you can assign your own profile with user-defined connection name and IP address. This enables the later distinction between several connections or configured values.

Access to each individual FL1F connection can be protected by a separate password.

FL1F

Set Password

Please choose a password to protect your configuration data. If the fields are left blank, no password is set.

New Password:

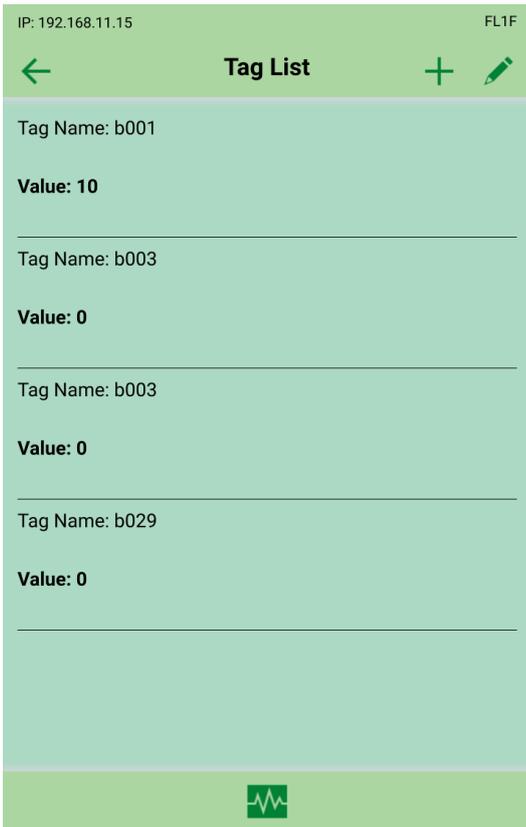
Confirm Password:

Save

... set a password for the FL1F App

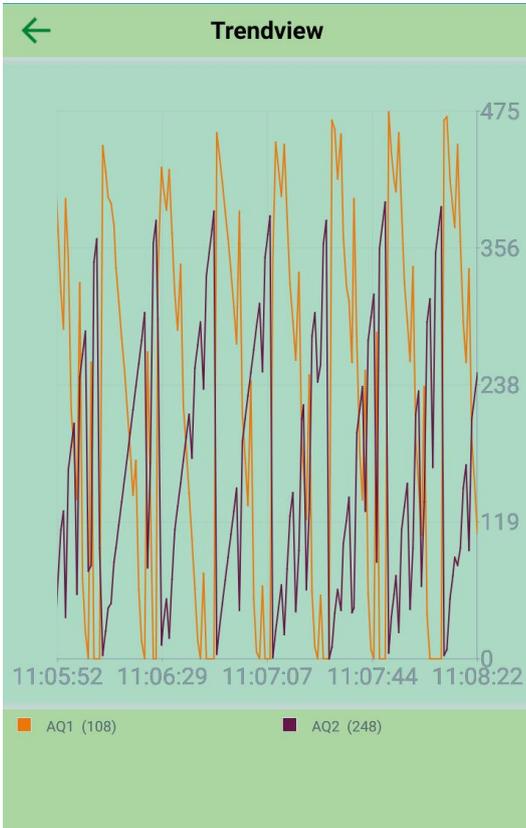
To protect the general access to the App you can specify a respective password for your App.

... In addition, you can assign a separate password for each configured FL1F connection.



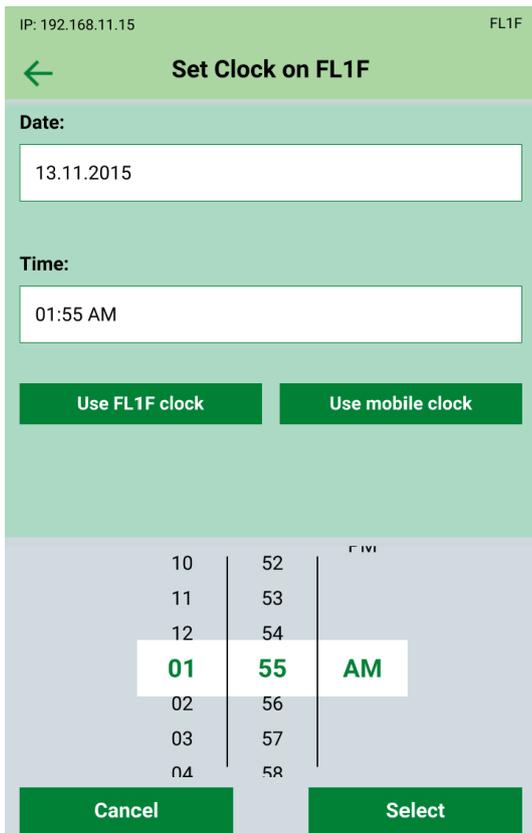
... modify and display values in a table

Configured values in the FL1F program, such as function block parameters or network I/O, can be represented in a table and modified.



... graphic display of values

Several of the configured values can be selected in the table and be graphically displayed in a trend view. A further configuration of the trend view is not necessary. The scale is adjusted automatically; in addition, the user-specific name of the selected values and the actual address are displayed.



... edit the FL1F date and time

Furthermore, the FL1F date and time can be read, manually modified or be adapted to the current date and time of the mobile device.

Note

Operating the plant on site, for example with FL1F Text Display, is not affected by the FL1F App and can be performed simultaneously

2 Operating environment

2.1 Supported OS

Supported OS *1	Android: Version 4.1 or later iOS: Version 6.0 or later
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*1 Full functionality is not guaranteed with all devices, even when above operating system is running.

- iOS is a trademark or registered trademark of Cisco.
- Google, Google Play and Android are trademarks or registered trademarks of Google Inc.

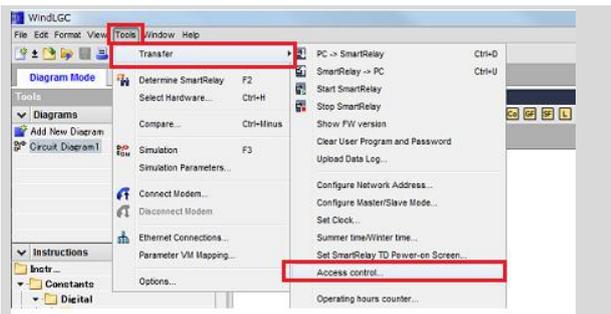
3 Instruction

3.1 Default settings and creating a connection with FL1F

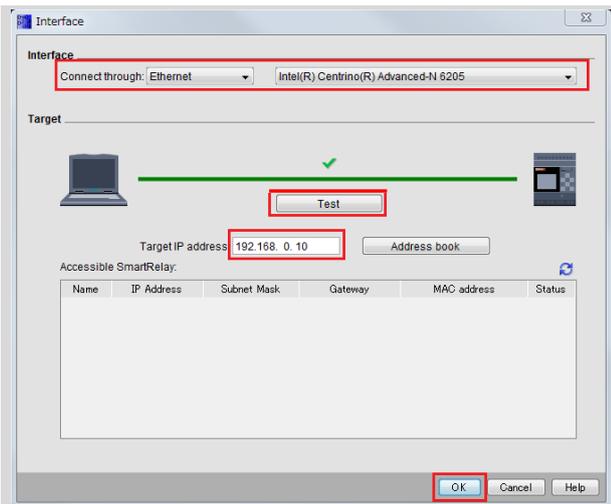
3.1.1 Specifying the password and access for the FL1F App in WindLGC

Prior to accessing FL1F via the FL1F App you need to enable the access in the respective FL1F controller as well as define a password for this access. These settings must be made in WindLGC Ver.8 and be loaded into FL1F.

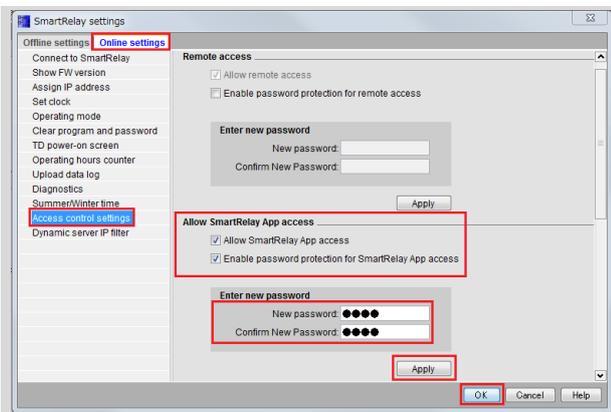
Proceed as follows:



In WindLGC Ver.8 you navigate to “Tools > Transfer > Access Control”.



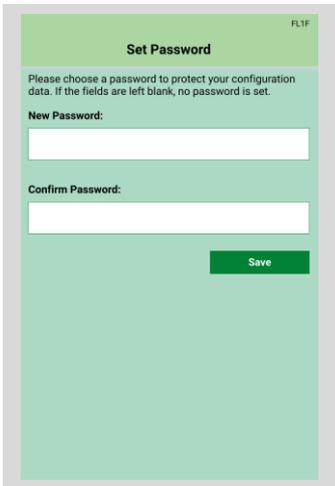
Select the “Interface” for your connection to FL1F and enter the IP address of your FL1F. Click “Test” in order to check whether the connection is successful. If the connection is successful click “OK” in order to load the program into the device.



Navigate to menu item “Access control settings” via the “Online settings” tab in “File > Properties”.

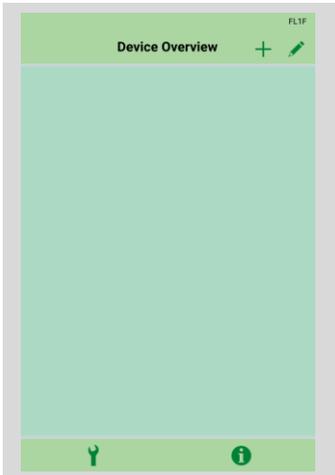
- Activate the “Allow FL1F App access” checkbox.
- Activate the “Enable password protection for FL1F App access” checkmark.
- Assign a password. This password must be identical with the respective password for the FL1F connection in your FL1F App! (Device view of the respective FL1F connection in the FL1F App)
- Click on “Apply” to accept the password.

3.1.2 Settings in the FL1F App



1. Password FL1F App
 When using FL1F App for the first time, the password mask in which you can specify a password for the FL1F App appears. (Respective specification in the “Y” mask later on is also possible)

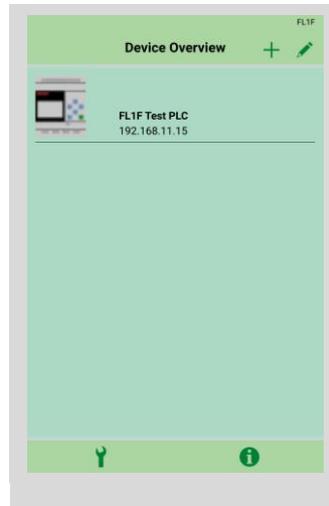
This password is only used for logging on to FL1F App. Access to the respective FL1F controller is specified in the device overview



2. Device overview
 Subsequently, you are directed to Device Overview.

In this screen you can add new FL1F devices (+) or edit existing connections (i).

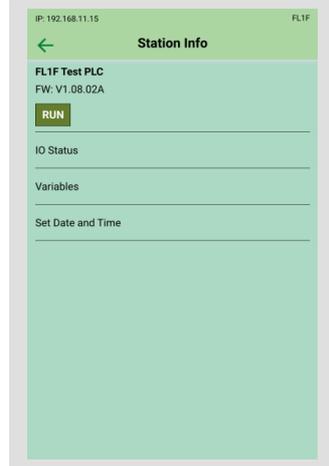
You can also choose the Settings menu or the Information dialog here. (Y and i)



4. Device overview

After the connection with FL1F has been established, you are taken back to the device overview where your specified FL1F connections are displayed.

Add connections to further FL1F devices with “+”



5. Check connection

Selecting the respective FL1F in the device overview takes you to the station information mask.

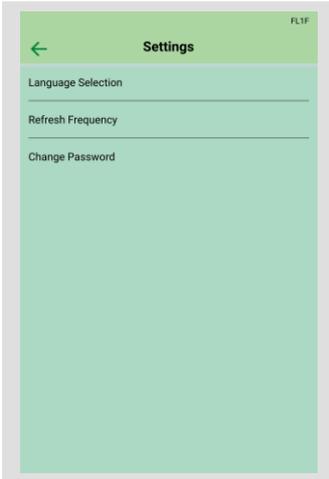
For an existing connection with FL1F, the current state (RUN/STOP) and the firmware of FL1F is shown.



3. Connections

In the “Create connection” mask you connect your mobile device to FL1F

- The name refers to the connection and can be assigned by the user.
- In IP Address you enter the IP address of your FL1F *)
- User name “App User” is default.
- In Password you enter the PW of your FL1F controller, **which you have specified via WindLGC.**



Settings

In menu item Settings, you can additionally specify

- Language,
- Refresh frequency
- and App password.

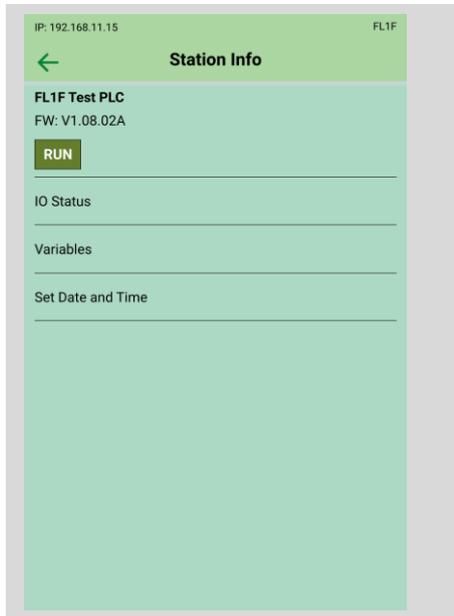
***) Note**

Your WLAN access point and the FL1F must be located in the same IP address space. For example:

IP address FL1F: 192.168.0.10

IP address WLAN: 192.168.0.x

3.2 Working with FL1F App

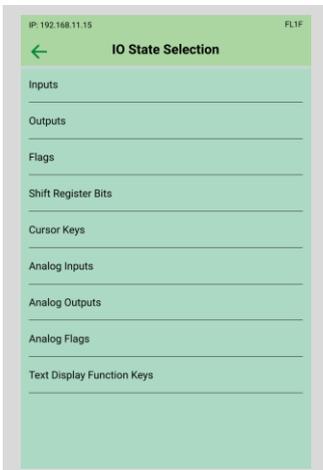


Starting point of the functions

In this “Station Info” overview mask the following functions can be accessed via the called masks:

- view IO status,
- view and change variables,
- set FL1F date and time.

3.2.1 Status displays of inputs/outputs, flags, and keys



I/O State Selection

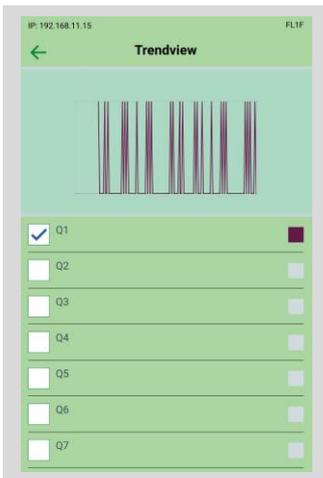
In “IO State Selection” you can access the status displays of inputs and outputs, flags of the FL1F keys, and the text display.

Some examples of status displays are given in further screens on this page.



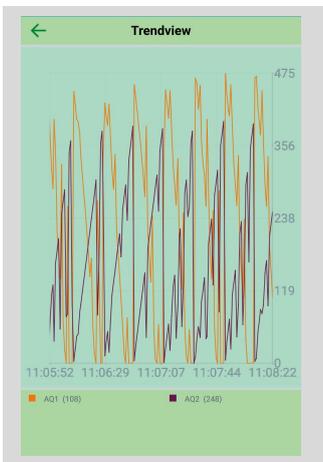
Outputs

Pressing “Outputs” shows the state and a short state history of the output signals.



Trendview outputs

The  icon takes you to the Trendview mask where you can view the values in a graphic display.



Trendview analog values

The  icon takes you to the Trendview mask where you can view the analog values in a graphic display.

3.2.2 Displaying and changing FL1F variables

Analog FB parameters

ID	Block	Parameter	Type	Address
1	B001 [PI controller]	Gain	Word	0
2	B001 [PI controller]	Aq	Word	2
3	B002 [Asynchronous puls...]	Pulse Width (TH)	Word	4
4	B002 [Asynchronous puls...]	Interpulse Width (TL)	Word	6
5	B002 [Asynchronous puls...]	Pulse Width (TH)	Word	8
6	B002 [Asynchronous puls...]	Interpulse Width (TL) T...	Byte	10
7	B003 [Up/Down counter]	Counter	DWord	11
8				

In order to display or change analog FB parameters in FL1F App you need to enter these FB parameters into the parameter VM table in WindLGC. (Menu item “Tools > Parameter VM assignment“)

FB parameter - read only (actual value in FL1F)

FB parameter - read and write

Calling the variable in FL1F App

The 'Add Tag' screen shows the following fields and options:

- Address:** Input field containing 'vw0'.
- Tag Name:** Input field containing 'b001'.
- Data Type:** Input field containing 'UNSIGNED'.
- Display Format:** A list of options: BINARY, SIGNED, UNSIGNED (highlighted), HEX, ASCII.
- OK** button at the bottom right.

Select the “Variables” mask in the “Station Info” mask.

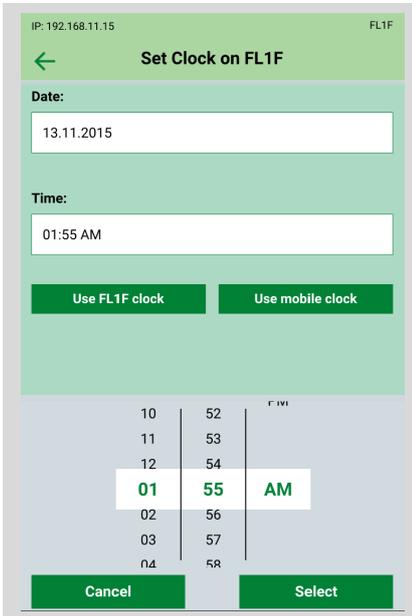
- The address corresponds to the V address of your network input or the FB parameter in the FL1F program.
- Assign a name to the variable.
- In Date Type you select the display format for the variable. For digital variables, select “BINARY”. For analog variables, select the desired display format, for example UNSIGNED.

The 'Change value on PLC' screen shows the following fields and options:

- Current Value:** Input field containing '10'.
- New Value:** Input field containing '20'.
- Write to PLC** button at the bottom right.

Enter the desired value in “New Value”. Tapping the “Write to PLC” button accepts the value as current variable value in FL1F.

3.2.3 Setting date and time

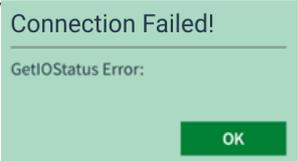
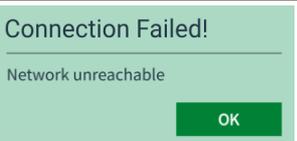
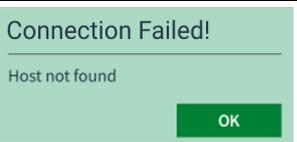


1. Date and time

Set date and time individually by selecting "Set Clock on PLC" in the Station info.

4 Troubleshooting

When making a connection to FL1F fails, the following error message will be displayed.

	Error message	Contents	Countermeasure
1		Network error. Access to http://xxx.xxx.xx.xx:8080/RPC- server is forbidden.	Check the network connection and try to reconnect to FL1F again.
2		No host name or IP address is given.	Specify the host name/IP address on “Create connection” screen.
3		Host name is invalid.	Specified hostname is invalid. Enter a host name with alphanumeric characters and period character.
4		Get IO Status Error.	Network error is caused by the auto-lock of the smart device. Try to reconnect to FL1F again.
5		Host is unreachable.	Check the host name and network connection.
6		Network is unreachable.	Check the IP address.
7		Host is not found.	Check the host name.



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