QUICK START GUIDE TO THE PEL 105 (GB)



To stop the instrument, disconnect the terminals and press the button for several seconds.

You cannot switch the PEL off while it is connected to a power source or while recording is in progress (or pending).

Release the key while the desired function is lit.

- If you release it while the REC indicator is lit, recording starts or stops.
- If you release it while the •)) indicator is lit, Wi-Fi is activated or de-activated.
- If you release it while the ***** indicator is lit, Wi-Fi is activated or de-activated.

INSTALLATION OF THE COLOUR-CODED IDENTIFIERS

For polyphase measurements, mark the current sensors, the voltage leads, and the terminals using the coloured rings and inserts provided with the instrument, assigning one colour to each terminal.

- Detach the appropriate inserts and place them in the holes above the terminals (the large ones for the current terminals, the small ones for the voltage terminals).
- Clip a ring of the same colour onto each end of the lead that will be connected to the terminal.



INDICATORS

Indicators	Colour and function
	Green indicator: Mains Indicator lit: the instrument is connected to mains by the external power supply (optional mains power unit). Indicator off: the instrument is powered by the battery or by the voltage inputs.
D	Orange/red indicator: Battery When the instrument is connected to mains, the battery is charged. Indicator off: battery fully charged. Indicator blinking orange: battery charging. Indicator blinking red twice a second: battery low (and no mains power).
	Red indicator: Phase order Indicator off: phase order OK. Indicator blinking once a second: phase order incorrect.
OL	Red indicator: Overshoot of the measurement range Indicator off: no overshoot on the inputs. Indicator blinking once a second: at least one input is outside range limits. Indicator lit: a lead is missing or is connected to the wrong terminal.
52	Red/green indicator: SD card Indicator lit green: the SD card is OK. Indicator lit red: SD card missing or locked. Indicator blinking red: SD card being reset. Indicator blinking alternately red and green: SD card full. Indicator blinking red once every 5s: the SD card will be full before the recording in progress ends.
•)))	Green indicator: Wi-Fi Indicator off: Wi-Fi is not activated. Indicator lit: Wi-Fi is activated but not sending. Indicator blinking: transmission by Wi-Fi in progress.

Indicators	Colour and function
*	Blue indicator: Bluetooth Indicator off: Bluetooth link de-activated. Indicator lit: Bluetooth link activated but not transmitting. Indicator blinking: Bluetooth link activated and transmitting.
REC	Green indicator: Recording Indicator blinking once every 5s: recorder on standby. Indicator blinking twice every 5s: recorder in record mode.
	Green/orange indicator: Start/Stop Indicator lit green: The instrument is on and is powered by the voltage inputs. Indicator blinking orange: Supply by the voltage inputs is de-activated.

INSTALLING PEL TRANSFER®

I Do not connect the instrument to the PC until you have installed the software and the driver.

- Insert the CD in your CD-ROM drive.
- Go to the PEL_Transfer_software directory and run setup.exe.
- Then follow the installation instructions.

Remark: For complete installation instructions, refer to the manual on the CD-ROM.

SD MEMORY CARD

The PEL accepts SD and SDHC cards, FAT32 formatted, up to a capacity of 32 GB.

The PEL is delivered with a formatted SD card. If you want to install another SD card:

- Check that the new SD card is not locked.
- Format the SD card using PEL Transfer (recommended) or using a PC.
- Open the elastomer cap marked S²
- Press on the SD card in the instrument and withdraw it.

Warning: do not withdraw the SD card if recording is in progress.

- Insert the new card and push it home.
- Put the elastomer cap back on to keep the instrument waterproof.

OPENING PEL TRANSFER

- Connect the voltage inputs of the PEL to mains. The instrument is turned on.
- Connect the PEL to the PC using the USB cable provided. Wait until the driver is fully installed before continuing.
- Double-click on the PEL icon ៅ on the desktop to open PEL Transfer.
- Select the Add instrument sicon in the toolbar or in the main Instrument menu.
- Follow the instructions of the Add an instrument wizard. If PEL Transfer does not detect the instrument in the pull-down list, click on the Update button.
- When the connection with the instrument is established, the name of the instrument should appear on the side left of the window in the PEL Network branch of the tree.



Example of PEL Network directory

CONFIGURING THE INSTRUMENT

To configure your PEL, select the instrument in the PEL Network directory.

Open the **Configure the instrument** dialogue box by clicking on the **Configure** kicon in the toolbar, in the **Instrument** menu, or in the **Status** zone.

This dialogue box has 6 tabs:

- General: Contains fields used to assign a name to the instrument and auto-off command, LCD display unit command, operating button, clock adjustment, and SD card formatting options.
- Communication: Options concerning Wi-Fi, the Bluetooth link, and the Ethernet network.
- Measurement: Selection of the distribution system, ratio of voltages, and selection of the frequency.
- **Current sensor:** Detection of the current sensors and choice of the nominal primary current.
- **Recording:** Recording parameter options.
- Meters: Reset of the meters and partial energy meter reset options.

Click on OK to transfer the new configuration to the instrument.

STARTING RECORDING (START/STOP)

To start recording, do one of the following:

- In PEL Transfer: Select the appropriate option in the Recording tab of the Configuration dialogue box. The instrument can be configured to start recording either at some future date and time, or immediately after recording is configured on the instrument.
- On the instrument: Press the Selection button and hold it down until the REC indicator lights, then release it. The instrument starts recording as it was previously configured to do.

To stop recording, do one of the following:

- On the instrument: Press the Selection button and hold it down until the REC indicator lights, then release it.

VIEWING THE RECORDING

The recorded data can be transferred to the PC in two ways and then be displayed there and used to create reports:

- The SD card can be withdrawn from the instrument and connected to the PC using the SD card reader provided. Start PEL Transfer, select the **Open** command in the **File** menu, point to the ICP file bearing the desired session number on the SD card, and select **Open**.
- Direct connection between the PC and the PEL (USB, Ethernet, Wi-Fi, or Bluetooth). Start PEL Transfer, open a connection to the instrument, select the instrument (make sure that it is connected) in the tree, then select **Recorded sessions**. Double-click on the desired recorded session.

When the download is over, select the downloaded test and click on the **Open** button in the Download dialogue box. In both cases, the session is added to **My open sessions** in the tree. The data can then be displayed.

