française
d'instrumentation

FITEST 65
Power consumption analyzer

1. INTRODUCTION

The FITEST 65 is an extremely easy-to-use energy consumption analyzer. Simply insert this ultra-light and compact box between the device to be analyzed and a wall outlet to instantly read the following data:

- Tension
- Current
- Frequency
- Instant power
- Power factor
- Energy consumed
- Total cumulative cost of energy consumed
- CO_2 emission equivalent in kg (carbon footprint)

It has a dual display and four direct function access keys.

The FITEST 65 alerts the user of an overload condition when the current exceeds 17.6 A for approximately 10 seconds.

The FITEST 65 also includes a battery which allows:
- to set the unit cost of kWh and the CO_2 emission equivalence in kg without plugging the device into a wall outlet.
- to save data
- to ensure the accuracy of the clock

2. SAFETY AND USE INSTRUCTIONS

For safety reasons, this device must only be used by qualified persons who are aware of the possible dangers involved.

Read this manual carefully before using the device.

In view of the potential hazards inherent in the use of any electrical circuit, it is important that the user be fully familiar with the instructions covering the possibilities, applications and operation of this device.
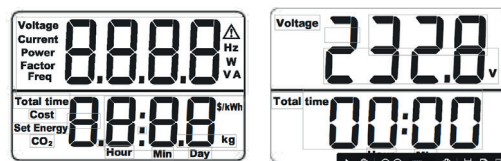
Under normal conditions of use, this device does not present any risk of electric shock to the operator. Its safety is guaranteed if the conditions of use and operation are respected.

The protection provided by this device may be compromised if its use does not comply with the instructions in this manual or if technical modifications are made at the discretion of the user.

Use this device in a clean environment away from dust, sunlight and humidity.

The load of this appliance must not exceed its maximum admissible power of 3,680 W (maximum current of 16 A). At full load, it is recommended to limit its use to 1 hour of service.

3. DESCRIPTION OF THE DISPLAY AND KEYS

The display area is divided into two parts.

The upper part corresponds to the main display area. The **MODEL key** allows you to scroll through the following parameters:
- [Voltage] Voltage in Volt [V]
- [Current] Current in Ampere [A]
- [Power] Power in Watt [W]
- [Factor] Power factor
- [Freq] Frequency in Hertz [Hz]

The lower part corresponds to the secondary display area. The **COST key** allows you to scroll through the following parameters:
- [Total time] Total cumulative time
- [Cost] Total cumulative cost
- [Energy] Energy consumed in kWh
- [CO_2] CO_2 emission equivalence in kg

The **SET key** allows you to set the unit price of kWh ($/kWh) for the [Cost] parameter (Total cumulative cost) and the CO_2 emission equivalence kWh for the [CO_2] parameter (CO_2 emission equivalence in kg).

The **+ key** has several functions which are detailed in the OPERATING MODES and AUTOMATIC STANDBY sections.
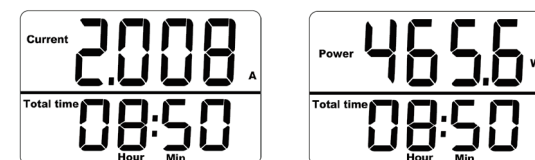
4. OPERATING METHODS

Plug the FITEST-65 into a wall outlet. The FITEST 65 starts automatically and displays the following standard default screen:
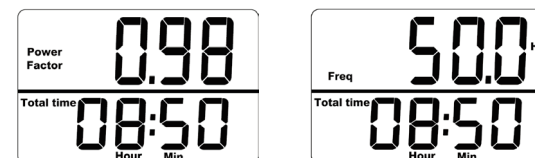

[Voltage] Voltage
[Total time] Total cumulative time.

Use the **MODEL key** to scroll through and select the parameters to display in the upper display area.

[Current] Current

[Power] Power

[Factor] Power factor

[Freq] Frequency

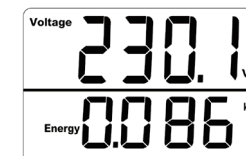Hold down the MODEL key to return to the default standard display [Voltage].

To use **the COST key** to scroll through and select parameters to display in the lower display area.

[Cost] Total cumulative cost

Press and hold the + key to reset the total cumulative cost to 0. Press the SET key to display the kWh unit price value ($/kWh).

[Energy] Energy consumed

Hold down the + key to reset the energy consumed to 0.

[CO₂] CO₂ discharge equivalence

Hold down the + key to reset the CO₂ emission equivalence value to 0.
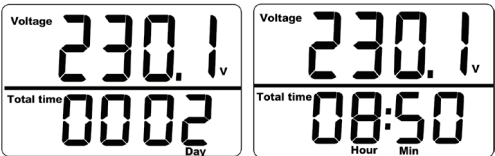
Press the SET key to display the reference value of CO₂ emission per kWh.

[Total time] Total cumulative time

Hold down the + key to reset the total cumulative time to 0.

If the total cumulative time is less than 1 day, only hours and minutes will be displayed.
If the total cumulative time is greater than 1 day, it will be displayed as a number of days (2 days in the following example).

Press the + key to display the hours and minutes of the current day.

In this example, the total cumulative time is therefore 2 days 8 hours 50 min.
Press the + key to display the seconds stopwatch.

Adjusting the unit cost of kWh

Use the COST key to select the [Cost] Total cumulative cost parameter.

Hold down the SET key to enter setting mode.

The first digit flashes. Use the + key to set the digit value between 0 and 9. Press the SET key to move to the next digit. Set all digits in the same way. Hold down the SET key to save the value and exit the setting mode.

The currency symbol displayed to indicate the price is $. The setting range is from 0 to 99.99 $/kWh. The default value is 01.00 $/kWh.

Note: The value can be set even if the FITEST 65 is not plugged into a wall outlet.

Setting the CO₂ emission equivalence per kWh

Use the COST key to select the [CO₂] parameter CO₂ emission equivalence in kg per kWh.

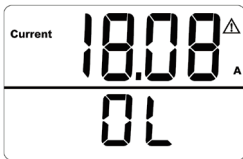Hold down the SET key to enter setting mode.

The first digit flashes. Use the + key to set the digit value between 0 and 9. Press the SET key to move to the next digit. Set all digits in the same way. Hold down the SET key to save the value and exit the setting mode.

The setting range is 0 to 9.999 kg. The default value is 0.998 kg per kWh.

Note: The value can be set even if the FITEST 65 is not plugged into a wall outlet.

5. OVERLOAD ALERT FUNCTION

The FITEST 65 alerts the user of an overload condition when the current exceeds 17.6 A for approximately 10 seconds; the OL LEDs, and other characters flash to prompt the user to turn off the power.

In these conditions, the FITEST 65 blocks all operations except current measurement. To exit this state, hold down one of the keys until you return to normal operating mode.
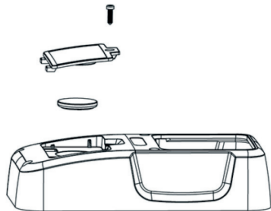
6. AUTOMATIC STANDBY FUNCTION

After unplugging from the wall outlet, the FITEST 65 will automatically enter standby mode if no operation is performed for 10 seconds to save the battery.

To "wake up" the FITEST-65, press the + key.

7. BATTERY REPLACEMENT

The battery is discharged when the display is blurred or non-existent or the LED flickers (the FITEST 65 is not plugged into a wall outlet). Be sure to unplug the FITEST 65 before replacing the battery.

Unscrew the screw securing the battery compartment cover on the back of the device. Replace the old battery with an identical model (reference CR2032) and replace the cover.

8. TECHNICAL CHARACTERISTICS

Voltage: 100 to 260 V AC 50 Hz
Current: 0 to 16 A AC
Power: 0 to 3680 W Power factor: 0 to 1.00
Energy consumed: 0 to 9999 kWh
Total cumulative cost: $0 to $9999
  (Currency is indicated with the $ symbol)
Total cumulative time: 0 Min to 9999 days
Frequency: 45 to 65 Hz
Overcurrent alert: > 17.6 A
Operating conditions: 0°C to 45°C / <95% RH
Storage conditions: -10°C to 60°C / < 95% RH
Power supply: one 3 V CR2032 battery
Screen dimensions: 50 x 36 mm
Weight: 155 g
Dimensions: 130 x 65 x 37 mm