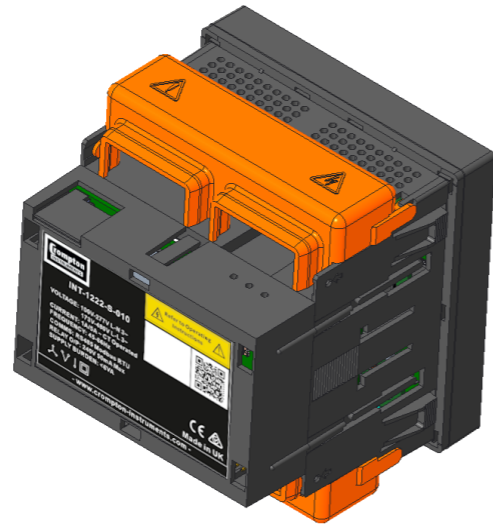




## Setup and Operation Guide

### Integra INT-1221/1222

### DataLogging Option Module



#### Specification

##### DataLogging

The datalogging option module provides data storage to a removable storage device.

Data stored is user defined and of three types  
 Billing Log – Active energy  
 Custom Log – User Defined Parameter

The memory card is supplied separately

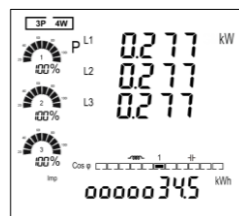
##### Installation

- Remove tab on rear label to expose connector
- Plug module on the rear of the product.

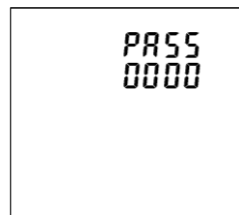
LED Status	Description
	Red - Failed to Write, Card write protected, No Card detected
	Orange - data Logging active (DO NOT REMOVE CARD)
	Yellow - Card being accessed (Read or Write)

##### Setup

Should setup of the option module be required, enter the setup screens by following the procedure below.



To enter setup mode, hold the and buttons for 3 seconds, until the password screen appears.



The setup is password-protected and must be entered before proceeding (default '0000').

Press 4 times.

If an incorrect password is entered, the product will exit the setup menu and return to the measurement screens. Entering the correct password will enter the setup mode.

#### Warnings Caution: Risk of Electric Shock

- During normal operation, voltages hazardous to life may be present at some of the terminals of this unit.
- At voltages below that specified in the Range of Use the meter may shut down. However, voltages hazardous to life may still be present at some of the terminals of this unit.
- Installation and servicing should be performed only by qualified, properly trained personnel abiding by local regulations.
- Ensure all supplies are de-energised before attempting connection or other procedures.
- Terminals should not be user accessible after installation and external installation provisions must be sufficient to prevent hazards under fault conditions.
- This unit is not intended to function as part of a system providing the sole means of fault protection - good engineering practice dictates that any critical function be protected by at least two independent and diverse means.
- The unit does not have internal fuses therefore external fuses must be used for protection and safety under fault conditions.
- Never open-circuit the secondary winding of an energized current transformer.
- This product should only be operated with the CT secondary connections earthed.
- If this equipment is used in a manner not specified by the manufacturer, protection provided by the equipment may be impaired

This document provides operating, maintenance and installation instructions for the INT 1221/1222 Datalogging option module. Each option module is sold separately and is installed by the user, following the details below.

#### Safety

**The unit is designed in accordance with BS EN 61010-1:2001 (IEC 61010-1:2001) – Permanently connected use, Normal condition. Installation category III, pollution degree 2, double Insulation. Measurement Category III.**

#### Maintenance

In normal use, no maintenance is needed. As appropriate for service conditions, isolate from electrical power, inspect the unit, and remove any dust or other foreign material present. Periodically check all connections for freedom from corrosion and screw tightness, particularly if vibration is present.

#### WARNING.

It is essential that the primary current is isolated BEFORE connecting or disconnecting the secondary current connections. **The unit is intended to be clipped onto the back of an Integra 12xx which is intended for panel mounting. Avoid mounting the unit where there is excessive vibration; in excessive direct sunlight; or outside a reasonably stable ambient temperature.**

#### DataLogger Menu Structure (Logr ----)

Top level menu, only available when the logger has been detected.

#### Logr Stat (Logr StAt on)

Logger Status (Enabled {on}, Disabled {oFF})  
 To enable/disable the datalogger

#### Logr SCAn (Logr SCAn ----)

Scan SDCard. Performs a scan of SD card checking the directory structure, as this can take a significant amount

of time the key must be pressed to start the process.  
 To access the memory card information e.g. free space/No. of files/No. of folders used.

#### Logr SACT (Logr SCAt StoP ----)

Logger Save Action when the SD Card is Full (Stop logging {StoP} Delete oldest files {dELE})  
 This function gives you options to set for when the memory card becomes full.

#### Logr CUSt (Logr CUSt ----)

Custom Log submenu entry point

(press to view/edit settings).

Here you are able to disable or activate the custom log. Up to 6 separate parameters can be logged simultaneously. A 3 digit parameter number can be entered here. A full list of Input parameter numbers is available in Section 4 of the Communications Guide. This can be found by scanning the QR Code below:-



#### Logr bill (Logr bill ----)

Billing Log submenu entry point (press to view/edit settings). Set the billing span time/ the billing sync time/ the billing interval time/ the billing interval cost.

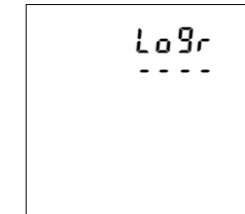
#### Logr rtC (Logr rtC ----)

Real Time Clock - Note: there will be a delay before the current time is displayed, wait until this is shown before pressing to edit.

#### Logr info (Logr inFo ----)

Logger information submenu entry point (Press to view software build number and logger serial number).

#### DataLogger Menu Structure (Logr)



Use the buttons to scroll through the available menu options until you get to the Logr screen.

Press to enter the Logr menu  
 This functions normally with the Datalogging module attached.



To enable/disable the datalogger press

the button, the selected choice will flash

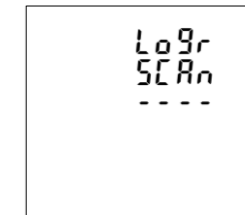
use the up or down arrow buttons to choose either the On/OFF option.



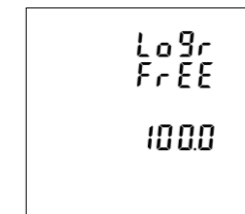
Press the button to select either on/OFF and set the option.

Press the button to escape to the

second level of the menu. Press the button to move to the next screen

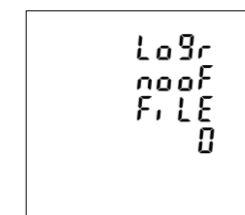


Press the button to access the memory card info. Including is capacity and free space.



This screen shows the free space on the memory card.


Press the button to move to the next screen





This screen shows the number of files stored on the memory card.

Press the button to move to the next screen

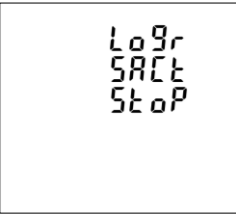
This screen shows the number of folders stored on the memory card.






Press the  button to escape to the second level of the menu. Press the  button to move to the next screen

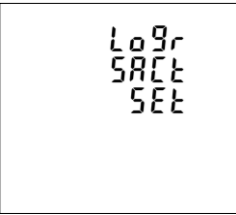
**Logr SACT (Logr SCASt StoP ----)**  
This function gives you options to set for when the memory card becomes full.


This option is for when the memory card gets full. You can either choose to StoP writing to the card when full, or overwrite the data (deleting oldest file first).





Press the  button, the selected choice will flash

Use the  up or down  buttons to choose either the StoP or dELE option.



Press the  button, to set the option.

Press the  button to escape to the second level of the menu. Press the  button to move to the next screen

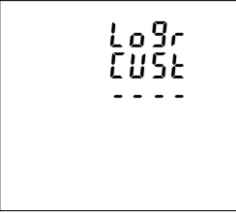
**Logr CUSSt (Logr CUSSt ----)**  
Here you are able to disable or activate the custom log. Up to 6 separate parameters can be logged simultaneously. A 3 digit parameter number can be entered here.


A full list of Input parameter numbers is available in Section 4 of the Communications Guide. This can be found by scanning the QR Code below:-




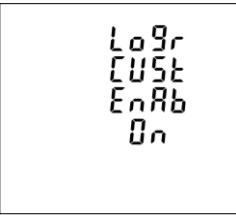
\*please note not all parameter numbers are valid for all meters.



Here you are able to disable or enable the custom log.




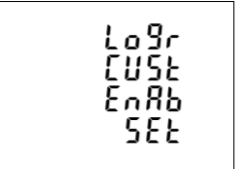
Press the  button, to see the selected option. Choices are On/OFF.


Press the  button, the selected choice will flash




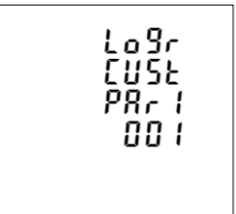
Use the  up or down  arrow buttons to choose either the On/OFF option.


Press the  button, to SET the option.








Press the  button to escape to the third level of the menu.


Press the down  arrow button to scroll through the parameters 1 through to 6.



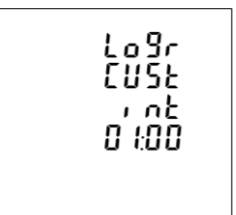
Press the  button, the selected choice will flash


To select the desired digits press the  up or down  buttons, press the  button to move through the digits. Press  to SET.






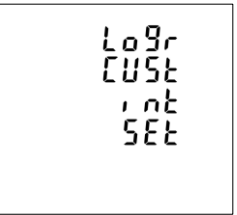
Press the  button to escape to the third level of the menu.


After the parameter list option scroll down to set the interval time you wish the data to be logged. This screen depicts the data will be logged every hour.





Press the  button, the selected choice will flash

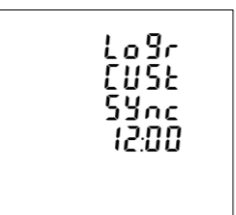
To select the desired digits press the  up or down  buttons, press the  button to move through the digits 24 hour clock.




Once the desired time is selected press the  button to SET.




Press the  button to escape to the third level of the menu. Press the  button to move to the next screen

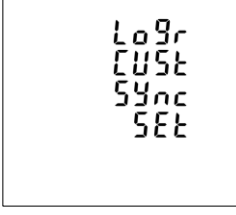
Set the sync time that the module will begin logging.





Press the  button, the selected choice will flash.


To select the desired digits press the

Use the  up or down  buttons, press the  button to move through the digits.

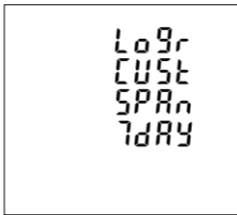



The choices are up to 24 hours  
Once the desired time is selected press the  button to SET.



Press the  button to escape to the third level of the menu.


Press the  button to move to the next screen


Set the span time required, this determines both the file structure created on the SD Card and the period for which the individual files record the data before creating a new file.




Press the  button, to set the option, the current option will flash.


Use the  up or down  arrow buttons to scroll through the choices 1dAY (daily), 7dAY (weekly), 28d (monthly), one quarter (0.25y), half a year (0.5y), one year (1Yr), two years (2Yrs).

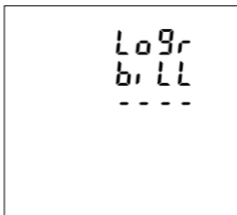
Once the desired time span is selected press the  button to SET.


Press the  button twice to escape to the third level of the menu.



Press the  button to move to the next screen.

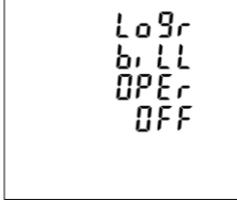
**Logr biLL (Logr biLL ----)**  
Set the billing span time/ the billing sync time/ the billing interval time/ the billing interval cost. Depending on the option chosen will determine the menu structure shown.


Press the  button, to enter the menu.

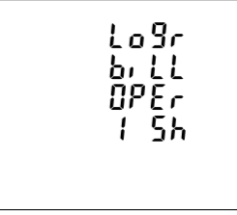



Press the  button again, to set the shift pattern, the current option will flash.


Use the  up or down  arrow buttons to scroll through the shift pattern choices: Off (oFF), One Shift per day (1 Sh), Two Shifts per day (2 Sh), Three Shifts per day (3 Sh), Four Shifts (4 Sh), Interval (int), Weekly (7dAY), Monthly (28d).

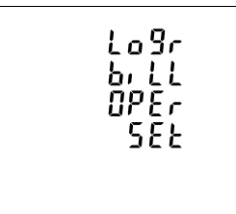


Once the desired shift pattern is selected press the  button to SET.




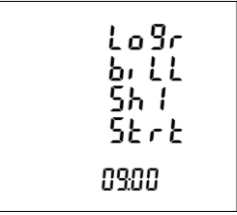
Press the  button to escape to the third level of the menu




Press the  button to move to the next screen.





**The following steps are for shift patterns 1-4. If you have selected (int), (7dAY) / (28d) skip ahead to the relevant section.**


Enter the start time of the shift by pressing the  button, the first digit will flash.




To select the desired digits press the  up or down  buttons, press the  button to move through the digits 24 hour clock.

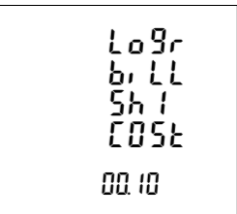
Once the desired time is selected press the  button to SET.

Press the  button to escape to the third level of the menu.




Press the  button to move to the next screen.


**Please Note: The start time of one shift determines the end time of the previous shift, shifts cannot overlap nor is there any provision for gaps between the shifts**


Here you can enter the unit costs. Enter the cost per unit by pressing the  button, the first digit will flash



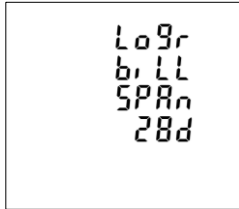
To select the desired digits press the

 up or down  buttons, press the  button to move through the digits and SET.

Press the  button to escape to the third level of the menu.

Press the  button to move to the next screen.

**Repeat these steps for each shift selected 1-4**



Set the span time required, this is the total time the bill will be logged for.

Press the button, to set the option, the current option will flash.

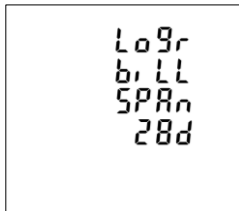
Use the up or down arrow buttons to scroll through the choices 1d (daily), 7dAY (weekly), 28d (monthly), one quarter (0.25Y), half a year (0.5Y), one year (1Yr), two years (2Yrs).

Once the desired time span is selected press the button to SET.

Press the button twice to escape to the second level of the menu.

Press the button to move to the next screen.

**The following steps are for Interval (int). If you have selected (7dAY) / (28d) skip ahead to the relevant section.**



Set the span time required, this is the total time the bill will be logged for.

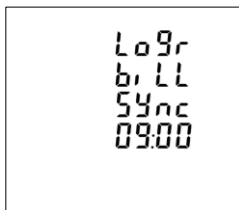
Press the button, to set the option, the current option will flash.

Use the up or down arrow buttons to scroll through the choices 1dAY (daily), 7dAY (weekly), 28d (monthly), one quarter (0.25Y), half a year (0.5Y), one year (1Yr), two years (2Yrs).

Once the desired time span is selected press the button to SET.

Press the button to escape to the third level of the menu.

Press the button to move to the next screen.

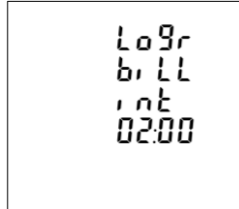


Set the sync time of the day that logging should be synchronised to i.e. a reading will be made at the selected sync time with all other log times, both before and after the sync time, being separated by the interval time.

**Note: If any time adjustments are needed to achieve the synchronising time it will be made at the start of the day (00:00 hours).**

Press the button, to set the option, the current option will flash. To select the desired digits press the

up or down buttons,



press the button to move through the digits. The choices are up to 24 hours.

Press the button to SET.

Press the button to escape to the third level of the menu.

Press the button to move to the next screen.

To set the interval time you wish the data to be logged. This screen depicts the data will be logged every 2 hours.

Press the button, to set the option, the current option will flash.

To select the desired digits press the

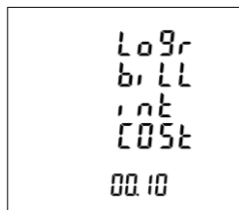
up or down buttons,

press the button to move through the digits 24 hour clock.

Press the button to SET.

Press the button to escape to the third level of the menu.

Press the button to move to the next screen.



Here you can enter the unit costs.

Press the button, to set the option, the current option will flash.

To select the desired digits press the

up or down buttons,

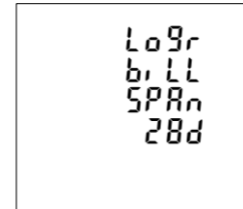
press the button to move through the digits.

Press the button to SET.

Press the button twice to escape to the second level of the menu.

Press the button to move to the next screen,

**The following steps are for Weekly (7dAY) and Monthly (28d)**



Set the span time required, this is the total time the bill will be logged for.

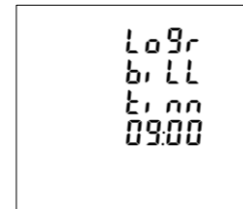
Press the button, to set the option, the current option will flash.

Use the up or down arrow buttons to scroll through the choices 1dAY (daily), 7dAY (weekly), 28d (monthly), one quarter (0.25Y), half a year (0.5Y), one year (1Yr), two years (2Yrs).

Once the desired time span is selected press the button to SET.

Press the button to escape to the third level of the menu.

Press the button to move to the next screen.



**Set the time you wish the data to be logged.**

Press the button, to set the option, the current option will flash.

To select the desired digits press the

up or down buttons,

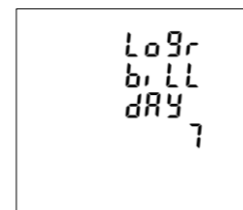
press the button to move through the digits 24 hour clock.

Press the button to SET.

Press the button to escape to the third level of the menu.

Press the button to move to the next screen.

**Set the day of the week you wish the data to be logged.**



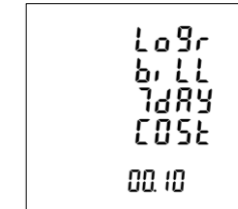
Press the button, to set the option, the current option will flash.

Use the up or down arrow buttons to scroll through the choices 1-7 days (1 = Monday).

Press the button to SET.

Press the button to escape to the third level of the menu.

Press the button to move to the next screen.



Here you can enter the unit costs.

Press the button, to set the option, the current option will flash.

To select the desired digits press the

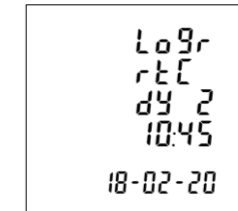
up or down buttons,

press the button to move through the digits.

Press the button to SET.

Press the button twice to escape to the second level of the menu.

**Logr rtC (Logr rtC ----)**  
Set the real time clock



This is the real time internal clock. To display the clock navigate to rtC and wait 2 seconds until the contents appears on the screen.

To select and change the day of the

week press the button, the digit

will flash use the up or down

arrow buttons to scroll through the choices 1 - 7 (1 = Monday).

Press the button to set the time the first digit will flash.

To select the desired digits press the

up or down buttons,

press the button to move through the digits 24 hour clock



Press the button to set the date the first digit will flash.

Use the up or down arrow buttons to select the desired digits 1- 31. (Days of the month)

Press the button to SET the month.

Use the up or down arrow buttons to select the desired digits 1- 12 (months).

Press the  button to SET year.

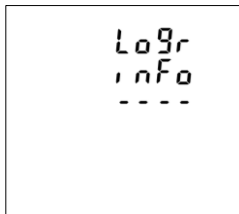
Use the  up or down  arrow buttons to select the desired digits 1 – 99 (years).

Press the  button to SET

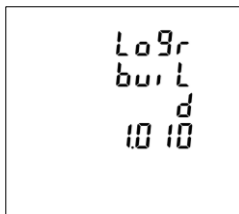
Press the  button to escape to the second level of the menu.

### Logr info (Logr inFo ----)

Datalogger serial number/software version

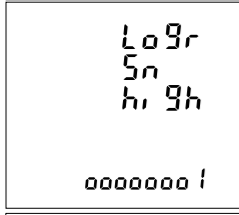


Press the  button to move to the next screen.

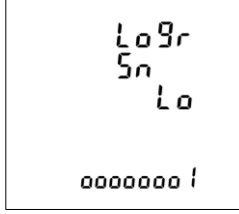


Press the  button, to view the module info.

This screen shows the software version number, (no changes can be made to this screen).



Press the  button, to view the serial number high, (no changes can be made to this screen).



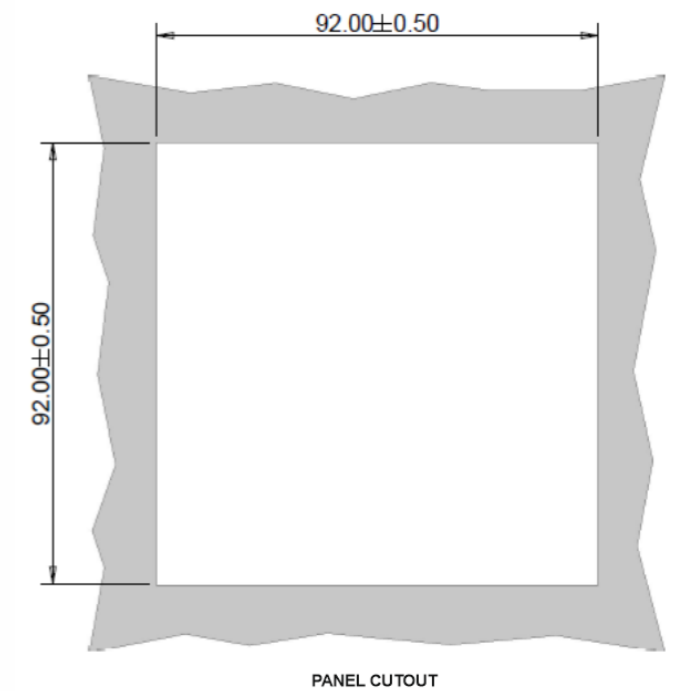
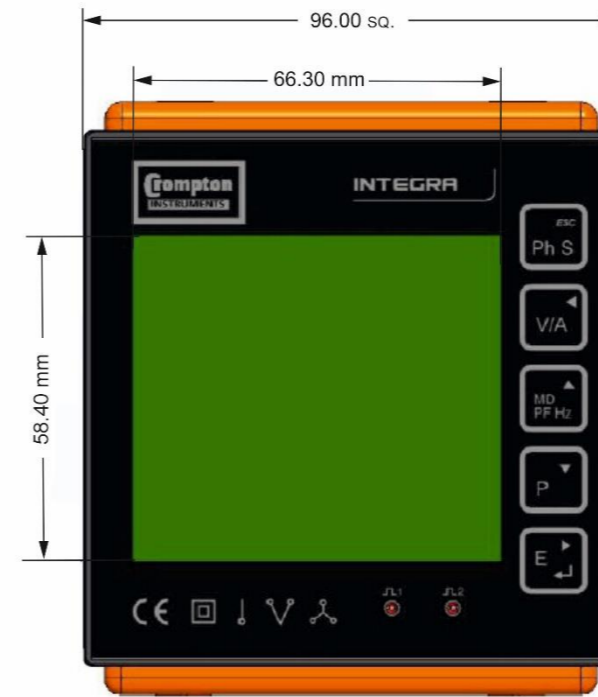
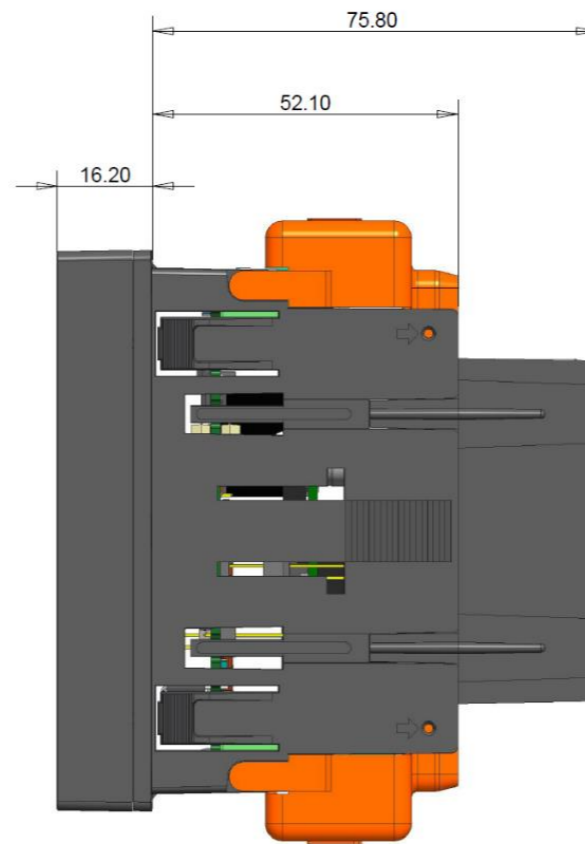
Press the  button, to view the serial number low, (no changes can be made to this screen).

Press the  button to escape to the second level of the menu.

### Mechanics

Material UL 94-V0

### Dimensions



### Explanation of Symbols



Refer to manual



Danger of electric shock



Do not discard



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