

**ELECTRONIC HEAT COST ALLOCATOR E-ITN 30.xx EX WITH A REMOTE SENSOR**

**Description and usage**

E-ITN 30.xx EX is a modern electronic device intended for ratio based allocation of heat cost in buildings with central heating system. Heat cost allocator E-ITN 30.xx uses the two-sensor measuring principle – integrates temperature difference between the sensor of the radiator surface temperature and the sensor of the surrounding temperature. Using this principle the allocator ensures measurement of consumption value only when the radiator really emits heat (i.e. it does not measure in the summer).

The allocator with the remote sensor is equipped with a mechanic and an electronic seal and is delivered in sealed state with the electronic seal activated. In case of unauthorized removal of the base plate the allocator saves the date of breach of the electronic seal to its memory and stops to show measured data on the display. Only the notice oPEn is displayed and indicates the breach of the electronic seal but allocator continues measuring and transmitting the measured data. Information about the breach of the electronic seal is available in the data transmitted by the radio module and via IR interface.

**Application**

In one-tube horizontal/vertical and two-tube heating systems with the lowest mean design heating medium temperature  $\geq 35\text{ }^{\circ}\text{C}$  and highest mean design heating medium temperature  $\leq 105\text{ }^{\circ}\text{C}$ .

E-ITN 30.xx EX is not intended for heat cost allocation for floor heating systems, ceiling radiant heating, flap controlled radiators, radiators with fan, systems with steam heating medium, air heaters and single tube radiators if exceeds the scope of one user. It must not be also used for heating elements that shape and design does not allow reliable transfer of heat to heat cost allocators.

Each radiator in billing (account) unit with common invoicing heat meter must be equipped with a heat cost allocator of the same type. Technical conditions of heating system must be fulfilled when using heat cost allocators E-ITN 30.xx EX.

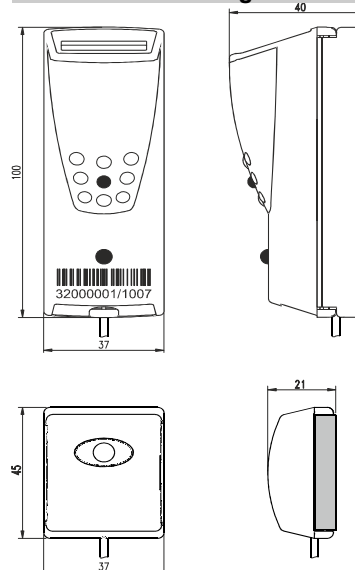
**Technical specification**

Application (heating medium)	$t_{\min} \geq 35\text{ }^{\circ}\text{C}$ $t_{\max} \leq 105\text{ }^{\circ}\text{C}$
Measuring principle	two-sensor meas. principle
Billing period	<b>year</b> (E-ITN 30.2 EX, E-ITN 30.6 EX) <b>month</b> (E-ITN 30.4 EX, E-ITN 30.6 EX)
Dimensions	allocator 100 x 37 x 33 mm
Operating frequency	868 MHz (E-ITN 30.2 EX, E-ITN 30.4 EX) 868,95 Mhz (E-ITN 30.6 EX)
Transmitting power	< 5 mW or < 1 mW
Conditions of registration	- sensor temperature of the radiator $\geq 23\text{ }^{\circ}\text{C}$ temperature difference between the mean heating medium temperature and the reference air

temperature  $\leq 5\text{K}$  (according to standard EN 834:2013), different conditions for registration in summer period

Material	ABS + PC / AI – F22 (E-ITN 30.2 EX, E-ITN 30.4 EX)
IP code	ABS + PC / AI – F (E-ITN 30.6 EX)
Conformity	IP 42 EN 834

**Dimensional drawings**



**Installation of E-ITN 30**

1. Install the base plate to the radiator according to the instructions in Installation and service manual.
2. Slide the locks in the upper part of the sensor housing on the base plate and push the bottom part of the housing to the base plate. The allocator must be fixed with the latch on both sides of back plate.
3. The base of the allocator is placed on the wall.

Do not install the allocator if the notice Error or Open is displayed on LCD.

**Activation of E-ITN 30**

If the sign uPr is displayed on LCD, the allocator must be activated:

1. When LCD is on and notice uPr is displayed, hold the button till notice --A-- appears that indicates sub-menu activation.
2. Switch to item Act with short button presses if necessary.
3. When notice Act appears, press and hold the button till notice --A-- is displayed. When you release the button, first menu item is displayed.

**Reading of measured data**

Basic allocator status and measured values can be displayed on LCD. The meaning of some values may be different if the additional symbol „SM“ at the right bottom corner is displayed. These values are mentioned with „SM“ symbol in text , e.g. 385 SM.

The last value shows the termination of the battery lifetime.



To save the battery, after longer period of inactivity (approx. 1 min.), energy-saving mode is activated and display is switched off. Display can be activated by pushing the button.

When pushing the button briefly, notice ---- on the display will appear. If the button is not pushed in 1 minute, the display will switch off.

### Displayed data


#### E-ITN 30.2 EX, E-ITN 30.4 EX

Value for current billing period	245
Value for last billing period	458 SM
Alphanumeric code for last billing period	A.O.i.h.t.
Serial number – first part	-3400
Serial number – second part	0060-

#### E-ITN 30.6 EX Wireless M-Bus

Consumption for the current billing year	245
Consumption for the past billing year	458 SM
Consumption for the current billing month	2.4.5
Consumption for the past billing month	4.5.8.SM
Serial number – first part	-3400
Serial number – second part	0060-

#### E-ITN 30.5, E-ITN 30.51 Wireless M-Bus

LCD test	
Current date	10.12.
Start of the billing period	u 1.2.
Value for last billing period	458 SM
Average surroundings temperature for last billing period	23.7°C SM
Value for current billing period	245

#### E-ITN 30.6 Wireless M-Bus

Value for current year billing period	245
Value for last year billing period	458 SM
Value for current month billing period	2.4.5
Value for last month billing period	4.5.8.SM
Serial number – first part	-3600
Serial number – second part	0060-

\* also other items can be displayed based on setting

### Transport and storage

#### Transport


- devices can be transported by all usual covered means of transport
- devices must be in original package
- originally packed devices must be stored and secured to avoid mechanical damages during transportation

- devices can not be transported together with aggressive substances
- temperature during transportation from -10 °C to +50 °C
- relative humidity from 45 % to 75 %

#### Storage

- devices must be originally packed by manufacturer and individually stored in antistatic bags
- storage temperature from +10 °C to +30 °C
- relative humidity from 45 % to 75 %
- devices must be stored in clean covered areas without aggressive substances and stored properly to avoid mechanical damage

#### Disposal

 This device is subject to a waste management in accordance with local legislation.

#### Possible minor faults and their elimination

Any E-ITN 30.xx EX defect should be repaired by manufacturer only.

#### Warranty terms and conditions

If device is installed and handled according to manufacturer instructions mentioned in Installation and service manual, manufacturer provide warranty under the valid legislation unless agreed differently.

The warranty is void if device was used contrary to Installation and service manual or damaged:

- during transport or storage by customer or reseller
- when mounted or dismantled to the customer device
- because of improper handling or installation into other device than agreed in manual
- if the product was exposed to different environment than agreed in manual
- if mechanically or in other way damaged by user

#### Declaration of conformity, declaration of directive RoHS

You can find declaration of conformity and declaration of directive RoHS on producer's web page: [www.metra-su.cz](http://www.metra-su.cz)

#### Warranty and post warranty repairs

Warranty and post warranty repairs have to be done by manufacturer. Pack the defective product and send back to the manufacturer's address.