

# Heat cost allocators

Sontex 565 / 566 / 868 / 878



## Application

Sontex now offers a complete range of products with its generation of heat cost allocators: the 565 as the basic model with an optical interface, the 566 with Sontex's own bidirectional radio link, the 868 with a standardised unidirectional radio link and the 878 for the Long Range Wide Area Network (LoRaWAN®).

The Sontex heat cost allocators offer maximum flexibility in parameter setting, notably simpler installation and commissioning, as well as improved follow-up of consumption rates. All four offer Swiss precision, maximum ease of use, highly reliable transmission and guaranteed fair invoicing for the consumer.

All models feature automatic commissioning when rail-mounted and can be easily equipped on site with a remote sensor. Password-protected parametrisation and AES-128 encryption of the consumption data at readout provide increased safety against unauthorised manipulation, too.

Up to 15 values can be displayed on the LCD, and up to 144 monthly values stored over the years contribute to maximum ease of use and readout. The data can be read off at any time.

## Features

- Single or two-sensor measurement method.
- Unit or product scale, to be defined according to the billing method.
- Meets EN 834:2013.
- User-friendly operation by push button.
- Optical interface for readout and parametrisation.
- Several device programming and reading software tools available.
- Peel-off barcode sticker for easy device registration.
- Lithium battery with a typical lifespan of 10 + 1 years.
- Made in Switzerland.

## Models

### Sontex 565

- LCD display
- Optical interface
- Visual reading only

### Sontex 566

- LCD display
- Optical interface
- Bidirectional radio communication SONTEx (433.82 MHz)

### Sontex 868

- LCD display
- Optical interface
- Unidirectional radio communication Wireless M-Bus (868.95 MHz)

### Sontex 878

- LCD display
- Optical interface
- Bidirectional radio communication LoRaWAN® EU868

### Sontex 565 X / 566 X / 868 X / 878 X

These heat cost allocators have the same features as the Sontex 565 / 566 / 868 and 878 models. The X models have a triangular sensor (as known from Kundo 201 / 202).

A remote sensor plug-in device is available for all heat cost allocator models. Once equipped with this sensor, the heat cost allocator will only work with a measurement method by remote sensor. The sensor cable is 2 or 5 meters long.

## Radio communication

### ■ Radio SONTEx

- Frequency: 433.82 MHz
- Communication: bidirectional
- Protocol: Radian 0
- Encryption: AES-128
- Transmission power: 10 mW (10 dBm)
- Transmission interval: on request

### ■ Radio wM-Bus

- Frequency: 868.95 MHz
- Communication: Unidirectional
- Protocol: Wireless M-Bus acc. EN 13757-4 (OMS Gen 4, Security profil A)
- Encryption: AES-128
- Transmission power: 25 mW (14 dBm)
- Transmission interval: Standard 120 sec. (Mode T1, encryption mode 5), 24/24 or 12/24 (Walk-by), 7T/7

### ■ LoRaWAN®

- Frequency: EU868, acc. ETS (EN300.220)
- Communication: Bidirectional class A
- Protocol: LoRaWAN®
- Encryption: AES-128
- Transmission power: 25 mW (14dBm)
- Transmission interval: parameterizable between 30 and 540 minutes depending on SF. Automatic switching between long (SF 7-9) and short (SF 10-12) telegrams depending on the accessibility of the end device.
- Uplink / Downlink: data coded according to EN60870-5 (M-Bus)

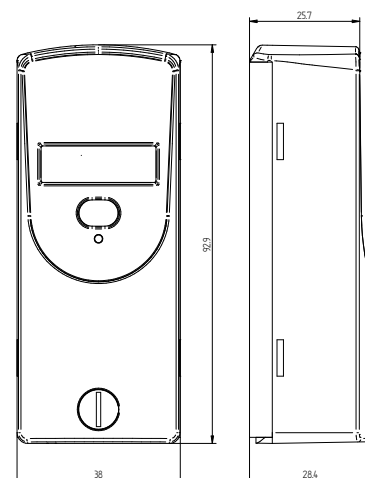
## Parametrisation

The Prog6 software enables you to parametrise Sontex 565 / 566 / 868 and 878 allocators via a standardised optical interface. Only authorised users can modify these settings.

The LoRaWAN® specific parameters can only be set with the Superprog software.

In order to protect your devices from frauds, the heat cost allocators, the Prog6 as well as the Superprog software have a password function. The factory-set "Installer" password can be changed for all heat cost allocators. Parametrisation prior to delivery greatly simplifies product handling.

## Dimensions



## Technical data

<b>Measurement method</b>	■ Method	single or two sensor
	■ Scale	unit or product scale
<b>Temperature</b>	■ Measuring range	from 0°C up to 105°C from 0°C up to 120°C (with remote sensor)
	■ Tmin	35°C (two sensor measurement method) 55°C (single sensor measurement method)
	■ Tmax	105°C 120°C (with remote sensor)
	■ Measurement start	parameterizable
	■ Radiator power	from 4 to 16'000 W
	■ Storage and transport	-20°C to 70°C (dry environment)
<b>Power supply and life span</b>	■ 3V lithium D battery	10+1 years
<b>Display</b>	■ LCD	6 digits (000000....999999)
<b>Protection class</b>	■ Index	IP 52 according IEC 60529
<b>Radio communication</b>	<b>Sontex Radio</b>	
	■ Frequency	433.82 MHz
	■ Communication	bidirectional
	■ Protocol	Radian 0
	■ Encryption	AES 128
	■ Transmission power	10 mW (10 dBm)
	<b>wM-Bus</b>	
	■ Frequency	868.95 MHz
	■ Communication	unidirectional
	■ Protocol	wM-Bus EN13757-4
	■ Encryption	AES 128
	■ Transmission power	25 mW (14 dBm)
	<b>LoRaWAN®</b>	
	■ Frequency	EU868
	■ Communication	bidirectional class A
■ Protocol	according EN60870-5	
■ Encryption	AES 128	
■ Transmission power	25 mW (14 dBm)	
<b>Optical interface</b>	■ Interface	according IEC 62056-21:2002

## CE Conformity

according RED 2014/53/EU

## UKCA Conformity

### Standard

according EN 834:2013

Certification: HKVO A1.02.2015

### Certificates

OMS Generation4

LoRaWAN® according Specifications V 1.0.2

### Technical support

For technical support, please contact your local Sontex agent or Sontex SA directly

### Hotline Sontex

support@sontex.ch, +41 32 488 30 04

Specifications are subject to change without notice