

Brunata

ROBERTO COLOMBO – Director Brunata d.o.o. and Regional director for the Group

About Brunata



- Danish company with **over 100 years of experience**
- Solutions that **help reducing the consumption of heat and water** in homes, buildings and cities
- HQ in Denmark and business **in over 15 countries**
- From 2018 part of Brunata.One, the **Brunata Minol Zenner** group **Ca. 4k employees**

Brunata

Brunata.One
Connecting solutions for a connected world

Brunata.One enables us to make classic technology sectors intelligent, connecting them to each other and enabling technological solutions in those areas where they previously did not exist.

City
Our solutions for public utilities, energy suppliers and

Living
Our solutions for the housing industry and your home.

Community
Our solutions for DIY, IoT professionals and institutions.

Industry
Our solutions for industry, business and logistics.

The infographic features a background image of a city skyline with a prominent skyscraper. Four colored circles (blue, red, orange, and green) are arranged in a diamond pattern, each containing text and a downward arrow. The circles are connected by a network of white lines and icons, including a house, a person, and a gear.

We are in the IoT market (Internet of Things) and we offer products and solutions for 4 market segments:

- The «Smart City»
- The «Smart Home / Smart Building» (Living)
- The «Smart Industry»
- The community of developers

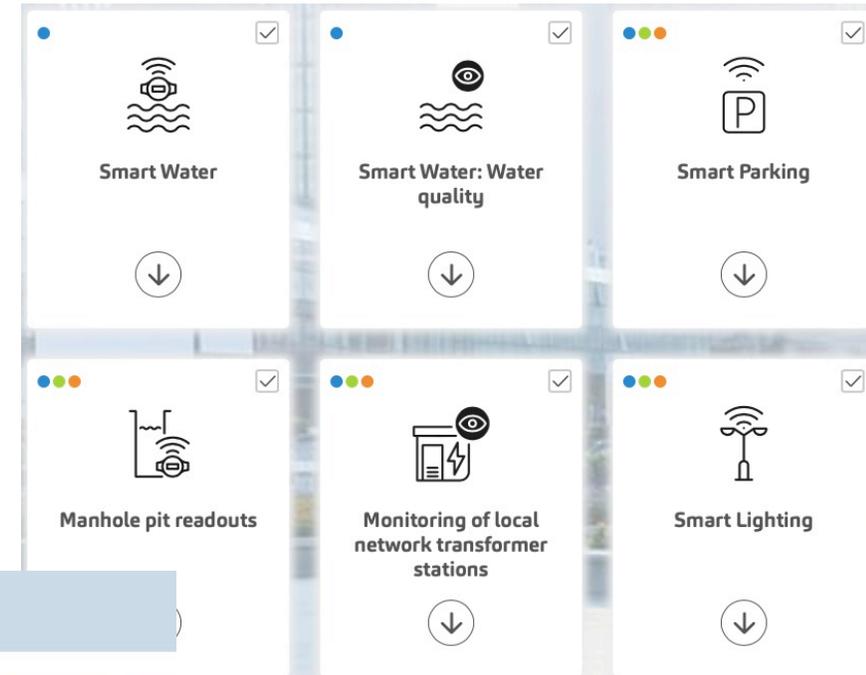
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We make cities smarter.

Perfectly coordinated end-to-end solutions for public utilities, municipalities and cities.



«Smart City»

- Metering: water and heat meters for district heating, distributors and aqueducts; main meter of the building.
- Sub-metering: water and heat meters for individual apartments and homes.
- Other solutions for:
 - ✓ water leakage monitoring
 - ✓ temperature of the heating water
 - ✓ measurement of the return flow
- E-mobility: Minol Drive



Brunata

One example: the city of Villach in Austria

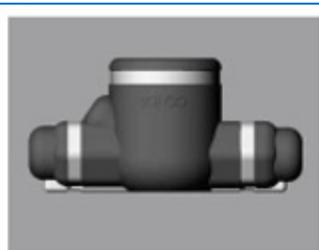
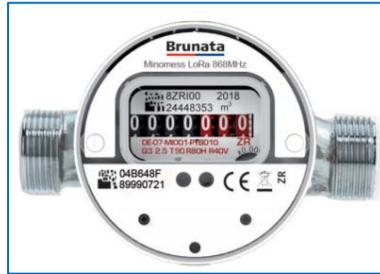


villach

- 100 km of pipes, 200 GWh of heating distributed
- We read the main meters in the buildings (heat and water)
- We do all the billing operations, down to the individual apartment
- We read the temperature of the heating water and the return flow
- We make maintenance of the LoRaWAN network

Brunata

We have all the meters and sensors for water, heat, flow, temperature, smoke...



What we deliver: only the meters or the full solution



+



+



+

SERVICE CONTRACT

I. The Parties. This Service Contract ("Agreement") made _____, 20____ ("Effective Date"), is by and between:

Service Provider: _____, with a mailing address of _____, City of _____, State of _____ ("Service Provider"),

AND

Client: _____, with a mailing address of _____, City of _____, State of _____ ("Client"),

Service Provider and Client are each referred to herein as a "Party" and, collectively, as the "Parties."

NOW, THEREFORE, FOR AND IN CONSIDERATION of the mutual promises and agreements contained herein, the Client hires the Service Provider to work under the terms and conditions hereby agreed upon by the Parties:

II. Term. The term of this Agreement shall commence on _____, 20____ and terminate: (check one)

- **At-Will:** Written notice of at least ____ days' notice.

- **End Date:** On _____, 20____.

- **Other:** _____

III. The Service. The Service Provider agrees to provide the following:

Hereinafter known as the "Service".

Service Provider shall provide, while providing the Service, that he/she/they shall comply with the policies, standards, and regulations of the Client, including local, State, and Federal laws and to the best of their abilities.

IV. Payment Amount. The Client agrees to pay the Service Provider the following compensation for the Service performed under this Agreement: (check one)

- \$ ____ / Hour

- \$ ____ / per Job. A "Job" is _____.

- Other: _____

 Page 1 of 4

Products

Network

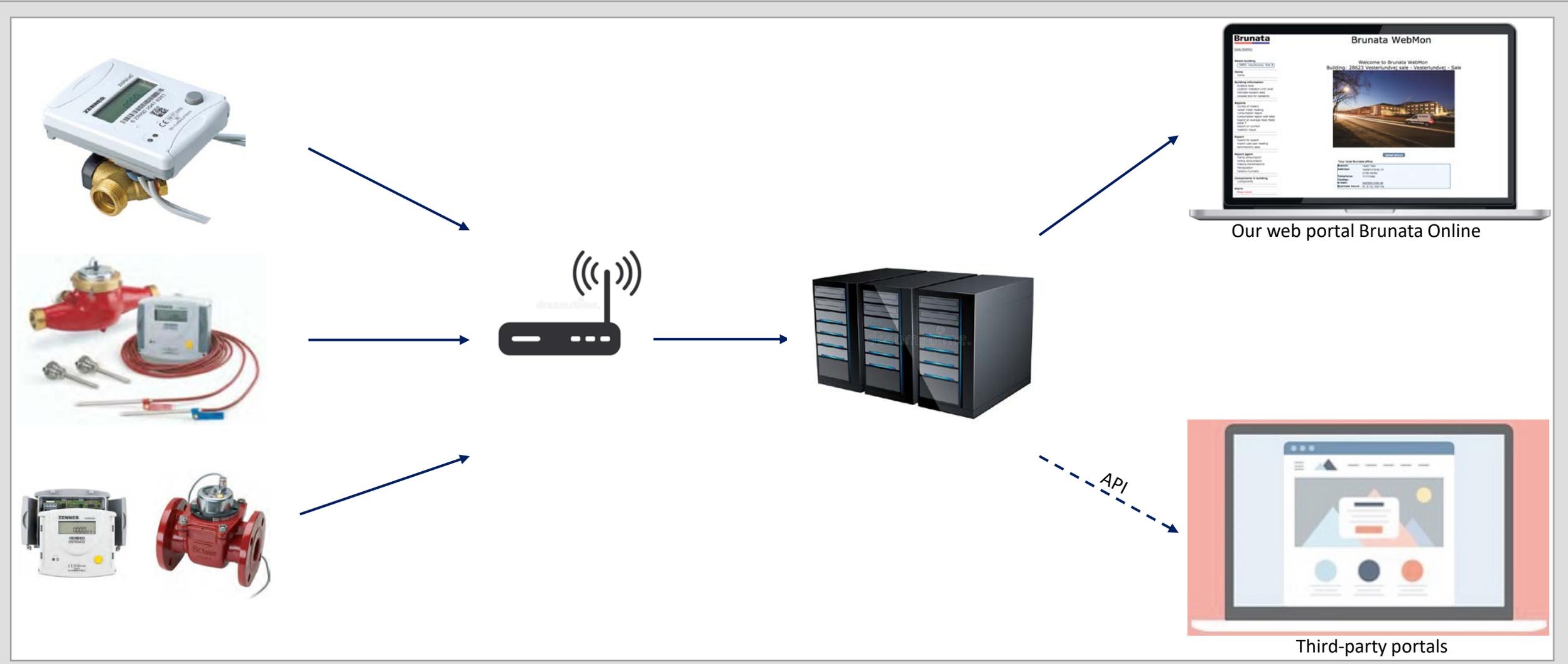
Installation

Reading/billing service contract



How the data flows:

Brunata



Our web portal Brunata Online

Third-party portals

Meters

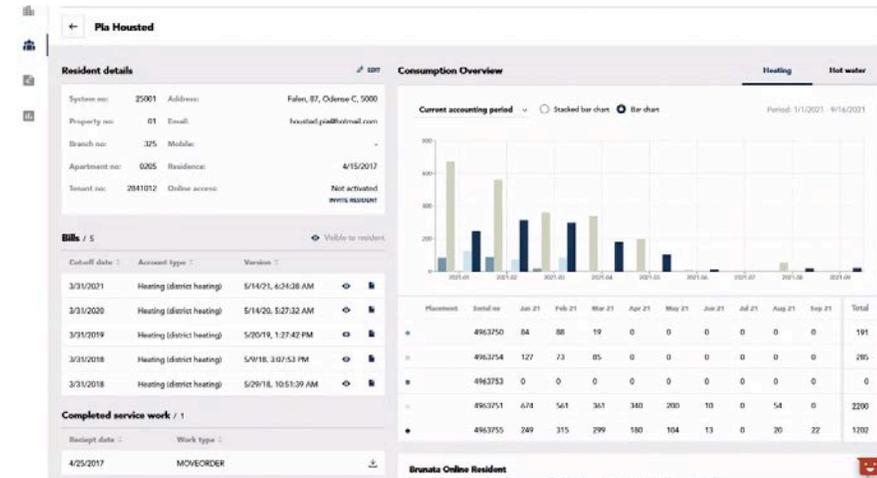
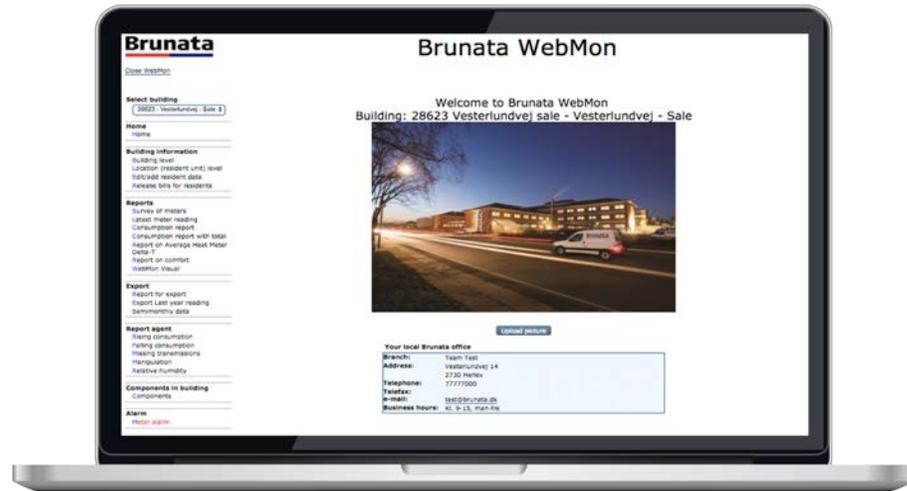
Gateway

Server

Applications

Brunata

- **Brunata Online:** web platform for utilities, building managers, administrators, end users.
- Real time monitoring, export files, alarms...



Report Agent - Rising consumption

The purpose of this report is to capture faulty meters and meters with an increase in consumption - such as running water.

The list will include meters, where consumption in the last xx days has increased by more than xx%. (Write a number in the field)

Consumption usage	Meter category	Days to compare	Deviation in %	Minimum units	Email schedule
Warm water	Water meter	50	10	0.1	Disabled
Heating	Radiator meter	100	10	0	Disabled

[+ Add new report](#)

Report Agent - Missing reading transmissions

The purpose of this report is to catch and identify meters we have not heard from in a while due to malfunctions in the meter or ass...

The list will contain the meters we have not heard from the last xx days.

Days to compare	Email schedule	Report send on email	Send blank reports
2	Daily 8AM	njo@brunata.dk	<input checked="" type="checkbox"/>

[+ Add new report](#)

Date/Rev.: 2020-12-286/2.0

Doc. Type: Interface Spec.

Interface Specification
Brunata Data Provider API



1 Introduction

1.1 Purpose

The purpose of this document is to describe the web API provided by Brunata for integration by stakeholder systems. The API consists of RESTful web services, which are cross platform and device and browser agnostic.

The endpoints are accessed using a combination of a descriptive URLs and HTTP verbs.

The data provided through the services originates from the Brunata meter data repository.

1.2 Scope

The scope is the subset of Brunata online web API that is related to meters and meter data. Accounting services and reports are not in scope.

Data based on meter readings are not validated, which is also applies to any consumption data provided.

Brunata

We can offer:

A. Reading of the meters and supply of the consumption data to our partner

DATI LETTURA				
Condominio Jenner 60, Viale Jenner, 60, IT-20100 Milano				
Periodo di contabilizzazione: 16.05.18 - 15.05.19				
Buttini Luciano Viale Jenner, 60 DX, 1-2 20100 Milano		N° Stabile N° Impianto N° di divisione N°	28874 00 00 0003 0000	Brunata S.r.l. Via G. Di Vittorio, 70 20026 Novate Milanese Tel.: +39 02 45381740 Tra: 09:00 - 16:00 Posta elettronica: contabilizzazione@brunata.it
La Vs. quota del costo				
Periodo 16.05.18 - 15.05.19				€ 0,00
Pagamento anticipato di				0,00
Da pagare				0,00
*Proprietario/amministratore: UNICASA ITALIA spa, Via Schiaffino, 25, IT-20158 Milano				
Specifiche della Vs. quota dei costi				
Dati Lettura				
Quote		Prezzo unitario	€	€
Quota a Consumo	5.084 unità	0	0,00	0,00
Totale				0,00
Costi totali per lo stabile				
Dati Lettura				0,00
Costi da allocare, in totale				0,00
<i>Costi allocati:</i>				
Dati Lettura				
Quote		Prezzo unitario	€	€
Quota a Consumo	129.041 unità	0	0,00	0,00
Costi allocati				0,00
Differenza di calcolo				0,00
Consumo dei contatori nel periodo conteggiato 16.05.18 - 15.05.19				
N° contatore	Letture Iniziale	Letture Finale	Impulsi	Quantità
5832964 STA	0	1.528	1.528	1.528
5832437 PRA	0	1.230	1.230	1.230
5832463 ING	0	870	870	870
5829109 BAG	0	1.456	1.456	1.456
Totale: Quota a Consumo / Dati Lettura				5.084

A

Brunata

We can offer:

B. Full individual cost allocation per building/apartment

Brunata S.r.l.
Via G. Di Vittorio, 70
20026 Novate Milanese
Tel. +39 02 45381740
09:00 - 16:00
Posta elettronica: contabilizzazione@brunata.it

RIPARTIZIONE TOTALE DEI COSTI

N° stabile 33823
Condominio Dante
Via Dante, 21
IT-20847 Albiate

Periodo di contabilizzazione: 04.10.17 - 13.10.18

Costo totale per lo stabile

Combustibile	4.824,00		
Energia Elettrica	781,25	5.605,25	Grp.1
Conduzione e Manutenzione		660,00	Grp.2
Servizio di Contabilizzazione		54,90	Grp.3
Costi da allocare		6.320,15	
Spese addebitate		0,00	
Costo totale:		6.320,15	
Differenza di calcolo:		0,02	
Allocato - in totale:		6.320,17	
Anticipi pagati:		0,00	
Costo totale da addebitare:		6.320,17	
Rimborso attuale ai residenti:		0,00	
Costi finali:		6.320,17	

Calcolo d'allocatione dei costi

Grp. 1	18.05 %	1.006,20 ->	69,82 %	706,20 ->	Acqua calda
		->	30,18 %	300,00 ->	mill. (ACS)
	81.95 %	4.599,05 ->	93,2 %	4.281,07 ->	Contatermie
		->	6,8 %	317,98 ->	mill. (CLI)
Grp. 2	81.95 %	540,00 ->	100 %	540,00 ->	mill. (CLI)
	18.05 %	120,00 ->	100 %	120,00 ->	mill. (ACS)
Grp. 3	81.95 %	40,00 ->	100 %	40,00 ->	mill. (CLI)
	18.05 %	14,90 ->	100 %	14,90 ->	mill. (ACS)

Rimborsi e pagamenti aggiuntivi:
Costi finali:

00 00 0002 0002

Mr. Mario Rossi

Periodo: 04.10.17 - 13.10.18

402,17 mill. (CLI)
316,97 mill. (ACS)

Dati dello stabile

Lo stabile ha 6 appartamenti - con i seguenti contatori:

Building mill. (CLI) Importo di: 1.000,0 m²

Gestore Contabilizzazione

Studio ~~Fininvest~~, Via Don Giovanni Rossi, 2
IT-20844 Triuggio

R	<u>Acqua Calda Sanitaria</u>					
	Consumi Volontari	43 m ³	4,28	184,04		
	Consumi Involontari	316,97 mill. (acs)	0,3	95,09	279,13	
	<u>Climatizzazione</u>					
	Consumi Volontari	8,517 kWh	111,62	950,67		
	Consumi Involontari	402,17 mill. (cli)	0,31798	127,88	1.078,55	
	<u>Manutenzione Ordinaria CLI</u>					
	Consumi Involontari	402,17 mill. (cli)	0,54	217,17	217,17	
	<u>Manutenzione Ordinaria ACS</u>					
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	Consumi Involontari	402,17 mill. (cli)	0,04	16,09	16,09	
	<u>Servizio di Contabilizzazione ACS</u>					
	Consumi Involontari	316,97 mill. (acs)	0,0149	4,72	4,72	
	In totale				1.633,70	0,00

B

Brunata

Thank you

Roberto Colombo

Regional director

www.brunata.one



Brunata

DENI ČIČA – Project Sales Manager, Region East

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The graphic features a cityscape background with four colored circles (blue, red, orange, green) representing different market segments. Each circle contains text and a downward arrow icon. The background also includes several small icons representing various IoT and smart technology concepts.

We are in the IoT market (Internet of Things) and we offer products and solutions for 4 market segments:

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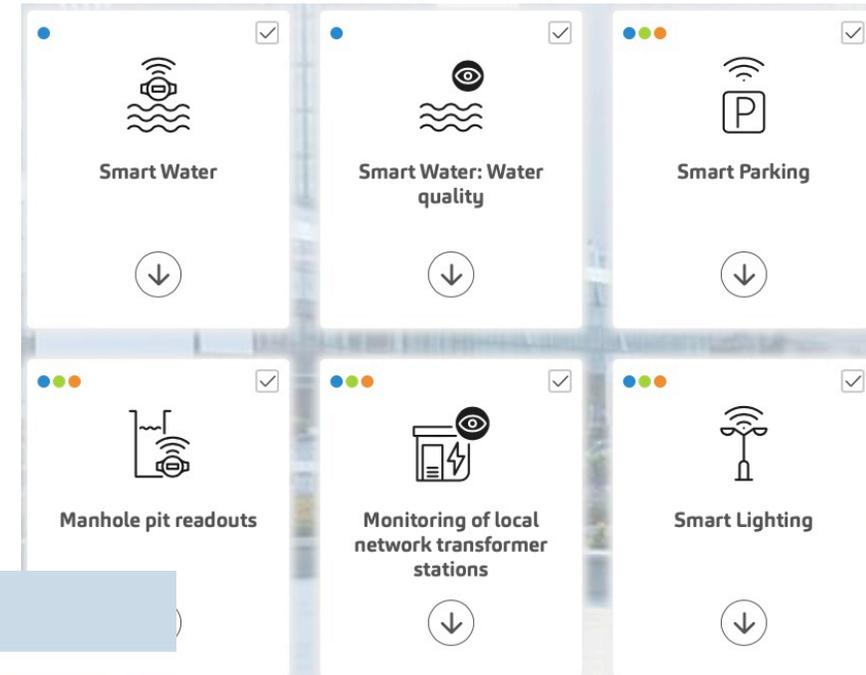
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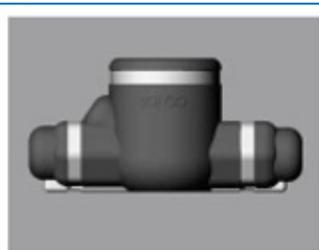
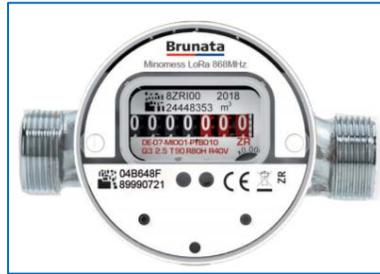


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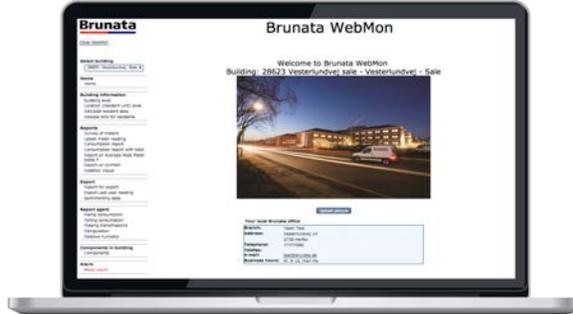
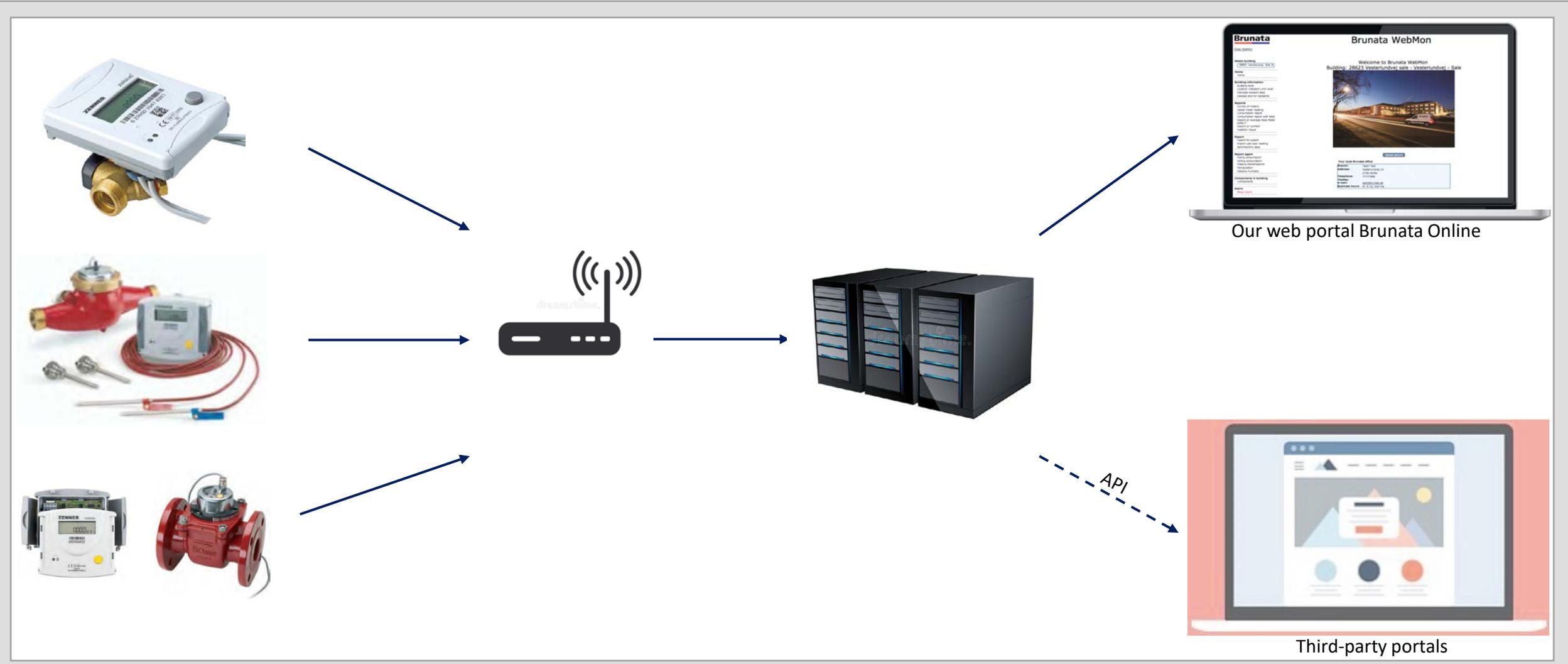
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Our web portal Brunata Online



Third-party portals



Meters



Gateway



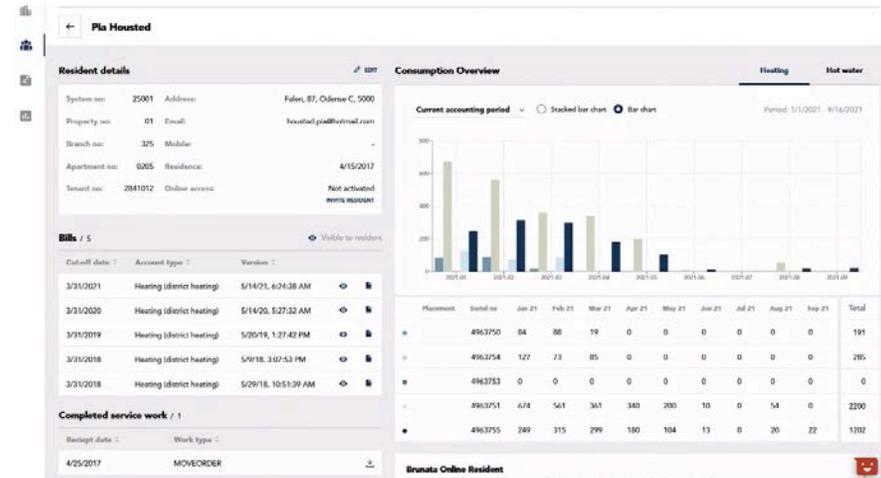
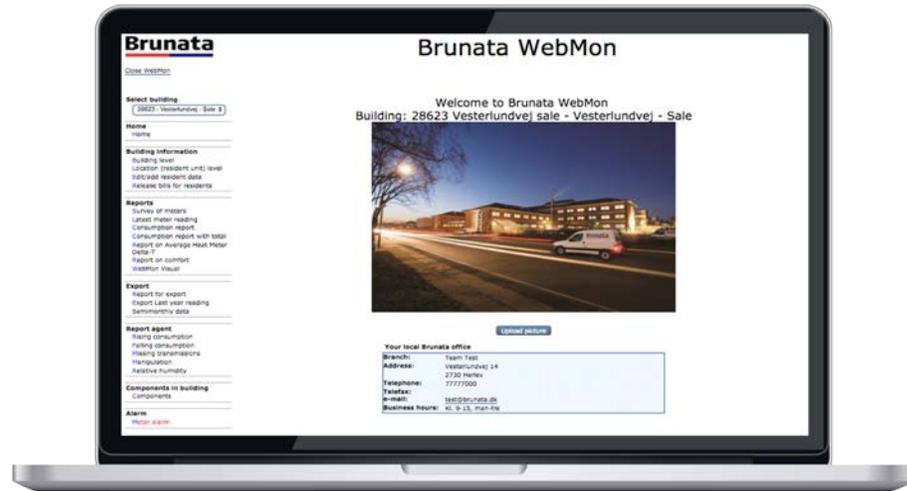
Server



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+ Add new report

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Days to compare	Email schedule	Report send on email	Send blank reports
2	Daily 8AM	njo@brunata.dk	<input checked="" type="checkbox"/>

+ Add new report

API:
Application Programming Interface

Brunata

Date/Rev.: 2020-12-286/2.0

Doc. Type: Interface Spec.

Interface Specification
Brunata Data Provider API



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La Vs. quota del costo				
Periodo 16.05.18 - 15.05.19				€ 0,00
Pagamento anticipato di				0,00
Da pagare				0,00
*Proprietario/amministratore: UNICASA ITALIA spa, Via Schiaffino, 25, IT-20158 Milano				
Specifiche della Vs. quota dei costi				
Dati Lettura				
Quote		Prezzo unitario	€	€
Quota a Consumo	5.084 unità	0	0,00	0,00
Totale				0,00
Costi totali per lo stabile				
Dati Lettura				0,00
Costi da allocare, in totale				0,00
Costi allocati:				
Dati Lettura				
Quote		Prezzo unitario	€	€
Quota a Consumo	129.041 unità	0	0,00	0,00
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Totale: Quota a Consumo / Dati Lettura				5.084

A

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Brunata S.r.l.
Via G. Di Vittorio, 70
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Tel. +39 02 45381740
09:00 - 16:00
Posta elettronica: contabilizzazione@brunata.it

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Costo totale per lo stabile

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Costi da allocare		6.320,15	
Spese addebitate		0,00	
Costo totale:		6.320,15	
Differenza di calcolo:		0,02	
Allocato - in totale:		6.320,17	
Anticipi pagati:		0,00	
Costo totale da addebitare:		6.320,17	
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Costi finali:		6.320,17	

Calcolo d'allocazione dei costi

Grp. 1	18.05 %	1.006,20 ->	69,82 %	706,20 ->	Acqua calda
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Grp. 3	81.95 %	40,00 ->	100 %	40,00 ->	mill. (CLI)
	18.05 %	14,90 ->	100 %	14,90 ->	mill. (ACS)

Rimborsi e pagamenti aggiuntivi:
Costi finali:

00 00 0002 0002

Mr. Mario Rossi

Periodo: 04.10.17 - 13.10.18

402,17 mill. (CLI)
316,97 mill. (ACS)

Dati dello stabile

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Studio ~~Fininvest~~, Via Don Giovanni Rossi, 2
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R	<u>Acqua Calda Sanitaria</u>				
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	Consumi Involontari	316,97 mill. (acs)	0,0149	4,72	4,72
	In totale				1.633,70

B

0,00

Brunata

Thank you

Deni Čiča

Project Sales Manager, Region East

www.brunata.one

