

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



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

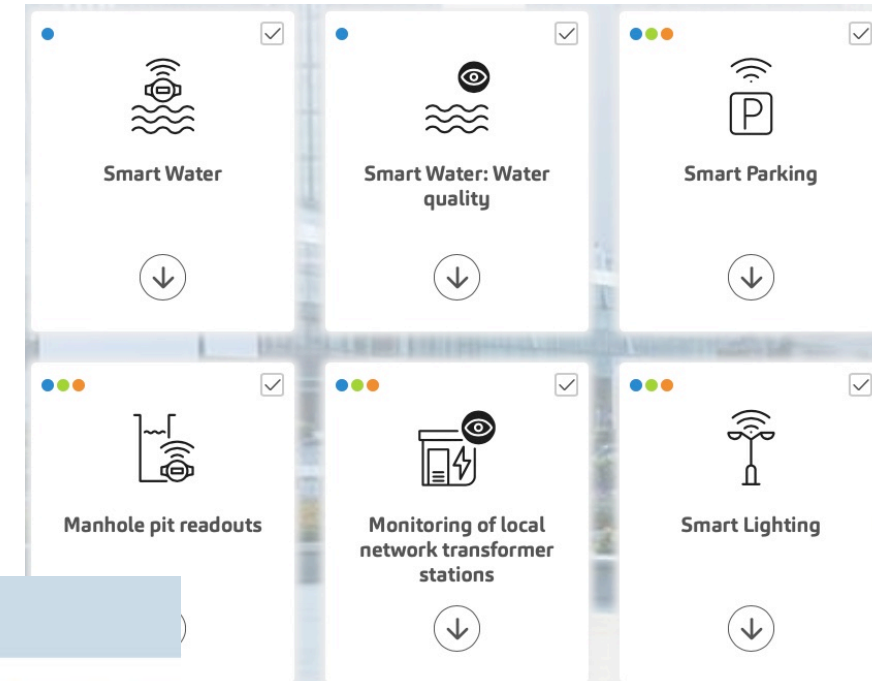
Brunata.One Connecting solutions for a connected world

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.



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

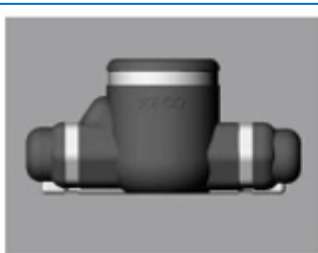
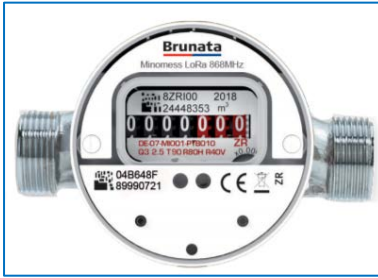


villach

- 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



Products

+



+



+

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:** _____.

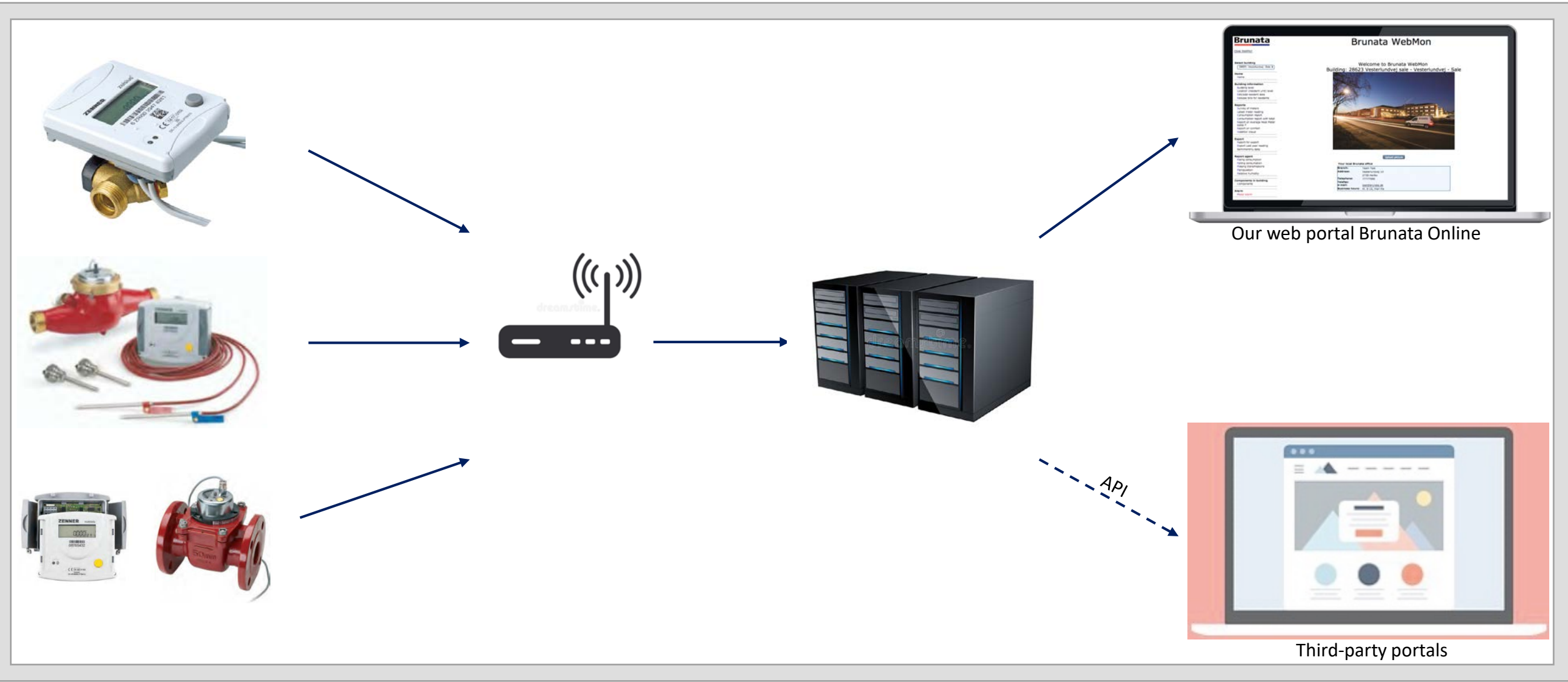


Installation

Reading/billing service contract

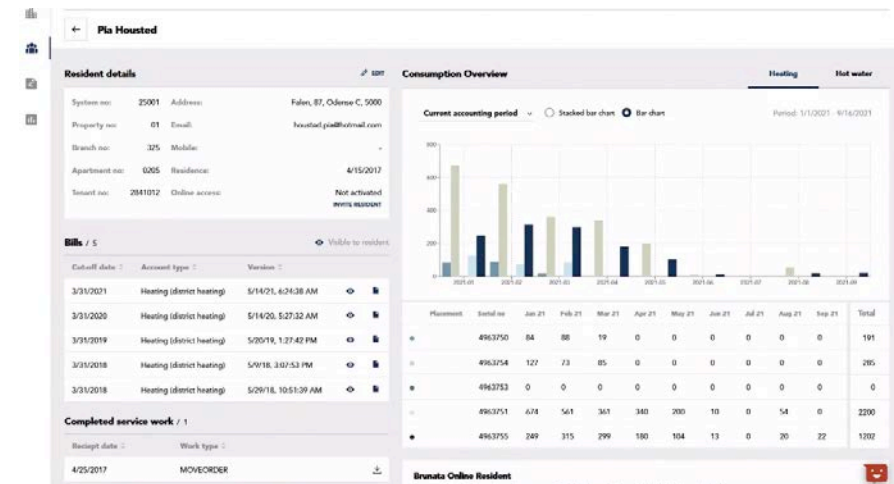
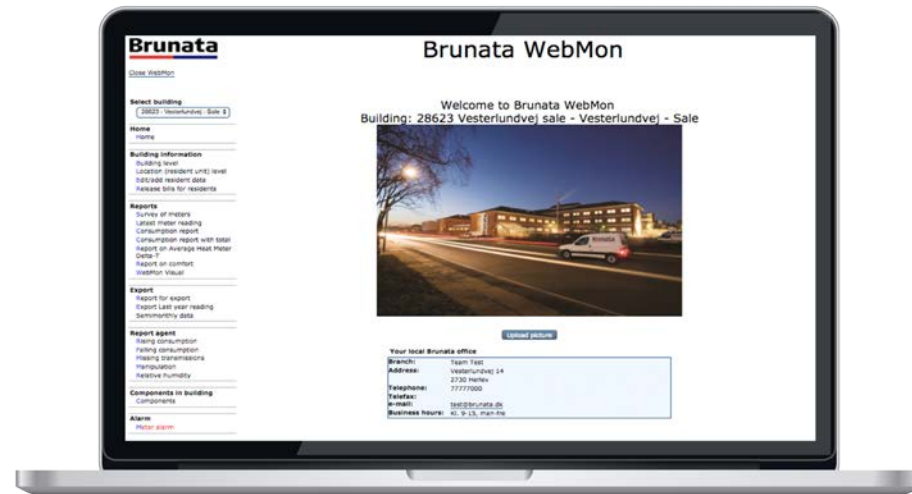


How the data flows: Brunata



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	Interface Specification Brunata Data Provider API	Brunata 
Doc. Type: Interface Spec.		

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
Costi allocati:				
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
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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		Calcolo d'allocazione dei costi			
Combustibile	4.824,00				
Energia Elettrica	781,25	5.605,25	Grp.1	18.05 %	1.006,20 -> 69,82 % 706,20 -> Acqua calda
Condizione e Manutenzione		660,00	Grp.2	->	30,18 % 300,00 -> mill. (ACS)
Servizio di Contabilizzazione		54,90	Grp.3	81.95 %	4.599,05 -> 93,2 % 4.281,07 -> Contatermie
Costi da allocare		6.320,15		->	6,8 % 317,98 -> mill. (CLI)
Spese addebitate		0,00	Grp. 2	81.95 %	540,00 -> 100 % 540,00 -> mill. (CLI)
Costo totale:		6.320,15		18.05 %	120,00 -> 100 % 120,00 -> mill. (ACS)
Differenza di calcolo:		0,02	Grp. 3	81.95 %	40,00 -> 100 % 40,00 -> mill. (CLI)
Allocato - in totale:		6.320,17		18.05 %	14,90 -> 100 % 14,90 -> mill. (ACS)
Anticipi pagati:		0,00			
Costo totale da addebitare:		6.320,17			
Rimborso attuale ai residenti:		0,00			
Costi finali:		6.320,17			
Rimborsi e pagamenti aggiuntivi:					
Costi finali:					
Dati dello stabile		<u>00 00 0002 0002</u> Mr. Mario Rossi Periodo: 04.10.17 - 13.10.18 402,17 mill. (CLI) 316,97 mill. (ACS)			
Lo stabile ha 6 appartamenti - con i seguenti contatori:					
Building mill. (CLI) Importo di: 1.000,0 m ²					
Gestore Contabilizzazione					
Studio Pavesani, Via Don Giovanni Rossi, 2 IT-20844 Triuggio					
		<u>Acqua Calda Sanitaria</u> R 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> Consumi Involontari 316,97 mill. (acs) 0,12 38,04 38,04 <u>Servizio di Contabilizzazione CLI</u> 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			

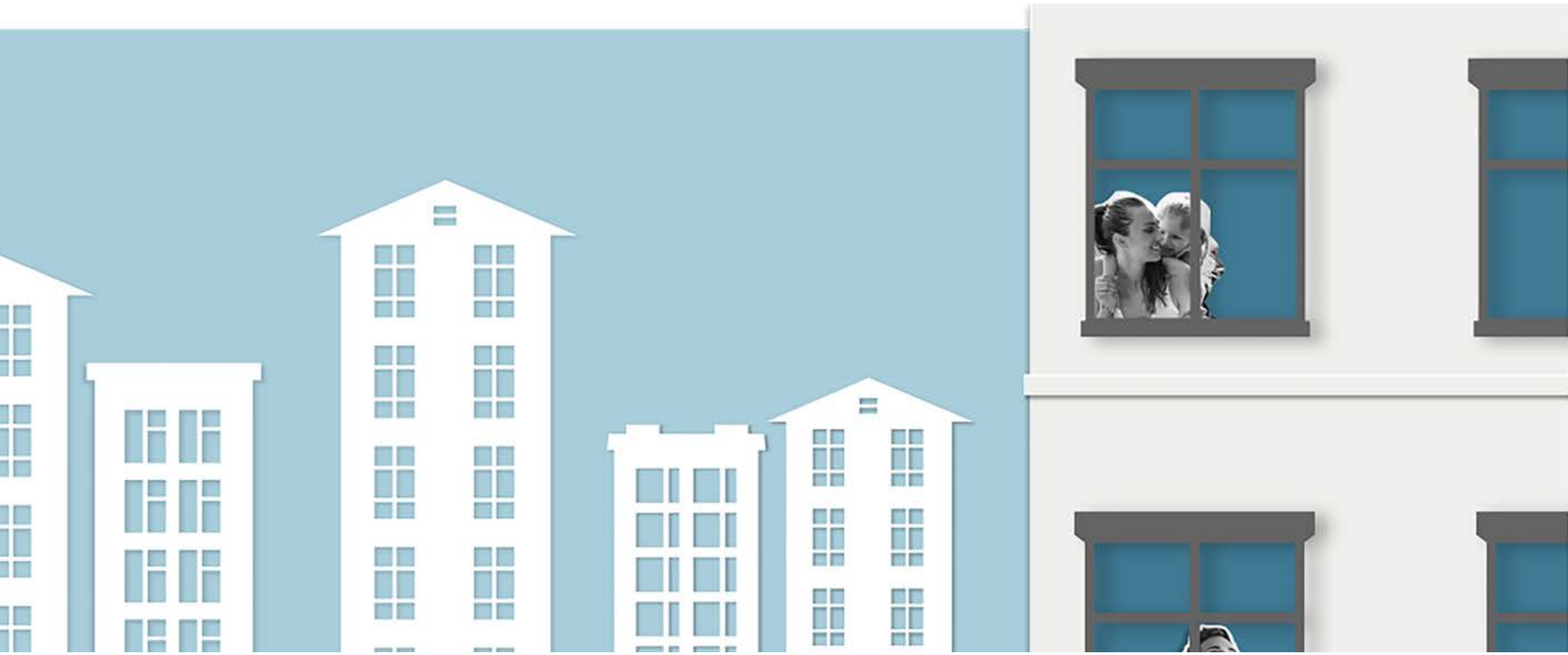
Brunata

Thank you

Roberto Colombo

Regional director

www.brunata.one



Brunata

DENI ČIČA – Project Sales Manager, Region East

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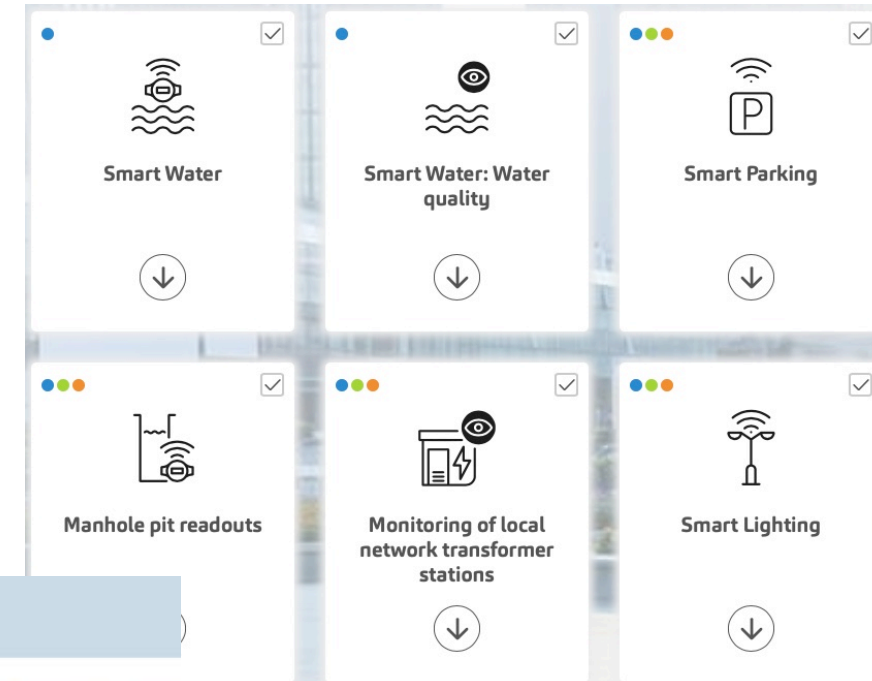
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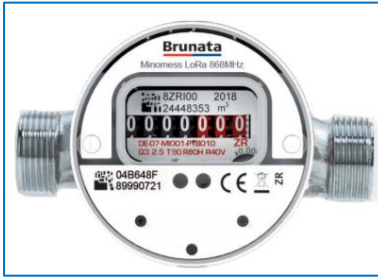


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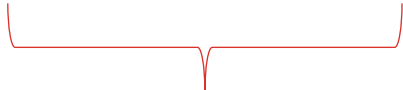
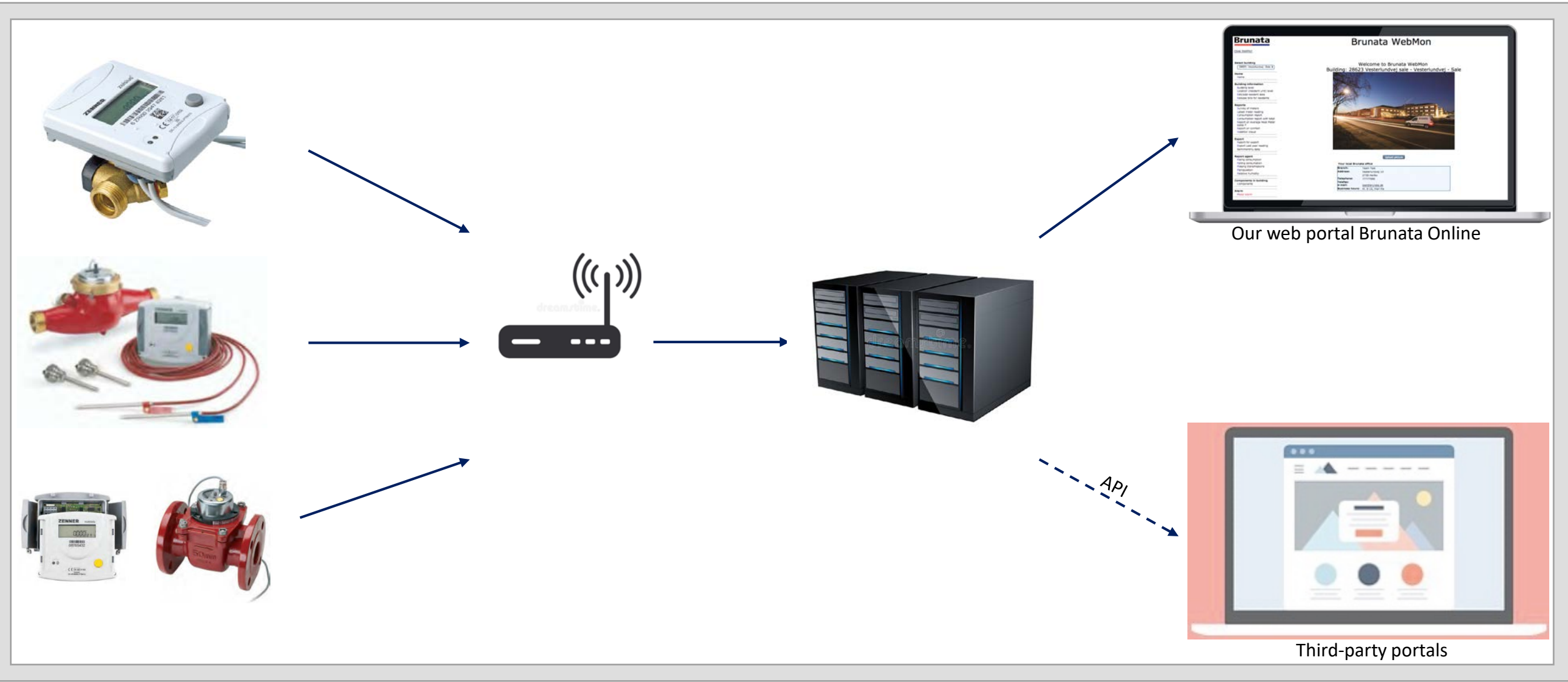


Installation

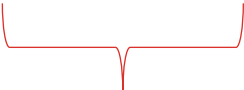
Reading/billing service contract



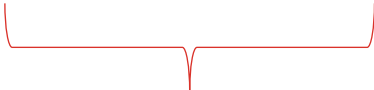
How the data flows: Brunata



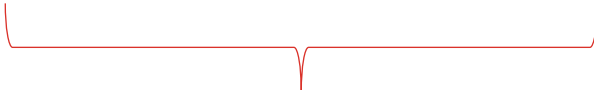
Meters



Gateway



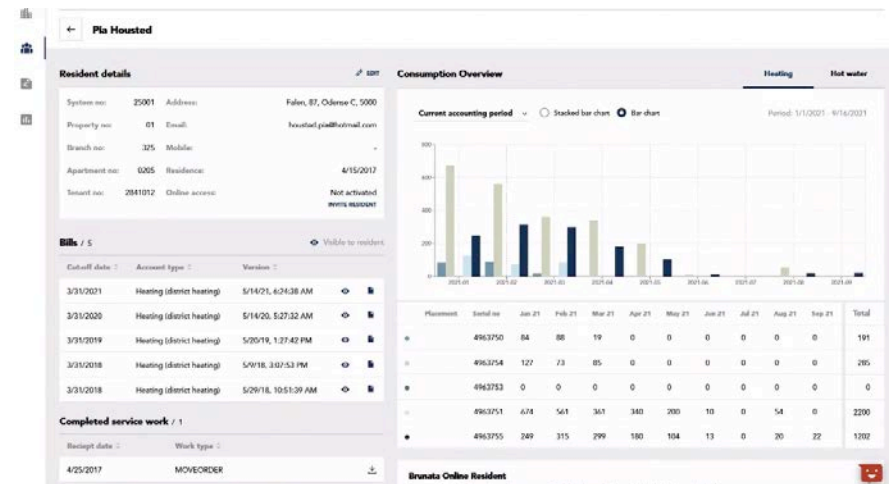
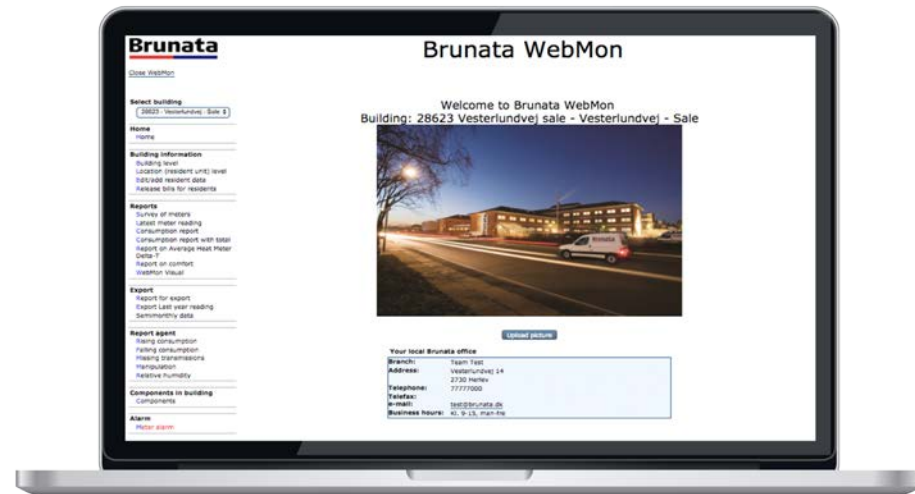
Server



Applications

Brunata

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[Add new report](#)

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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
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[Add new report](#)

Date/Rev.: 2020-12-286/2.0	Interface Specification Brunata Data Provider API	Brunata 
Doc. Type: Interface Spec.		

1 Introduction

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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		Calcolo d'allocazione dei costi			
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Differenza di calcolo:		0,02	Grp. 3	81.95 %	40,00 -> 100 % 40,00 -> mill. (CLJ)
Allocato - in totale:		6.320,17		18.05 %	14,90 -> 100 % 14,90 -> mill. (ACS)
Anticipi pagati:		0,00			
Costo totale da addebitare:		6.320,17			
Rimborso attuale ai residenti:		0,00			
Costi finali:		6.320,17			
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Dati dello stabile		<u>00 00 0002 0002</u> Mr. Mario Rossi Periodo: 04.10.17 - 13.10.18 402,17 mill. (CLJ) 316,97 mill. (ACS)			
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Brunata

Thank you

Deni Čiča

Project Sales Manager, Region East

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