

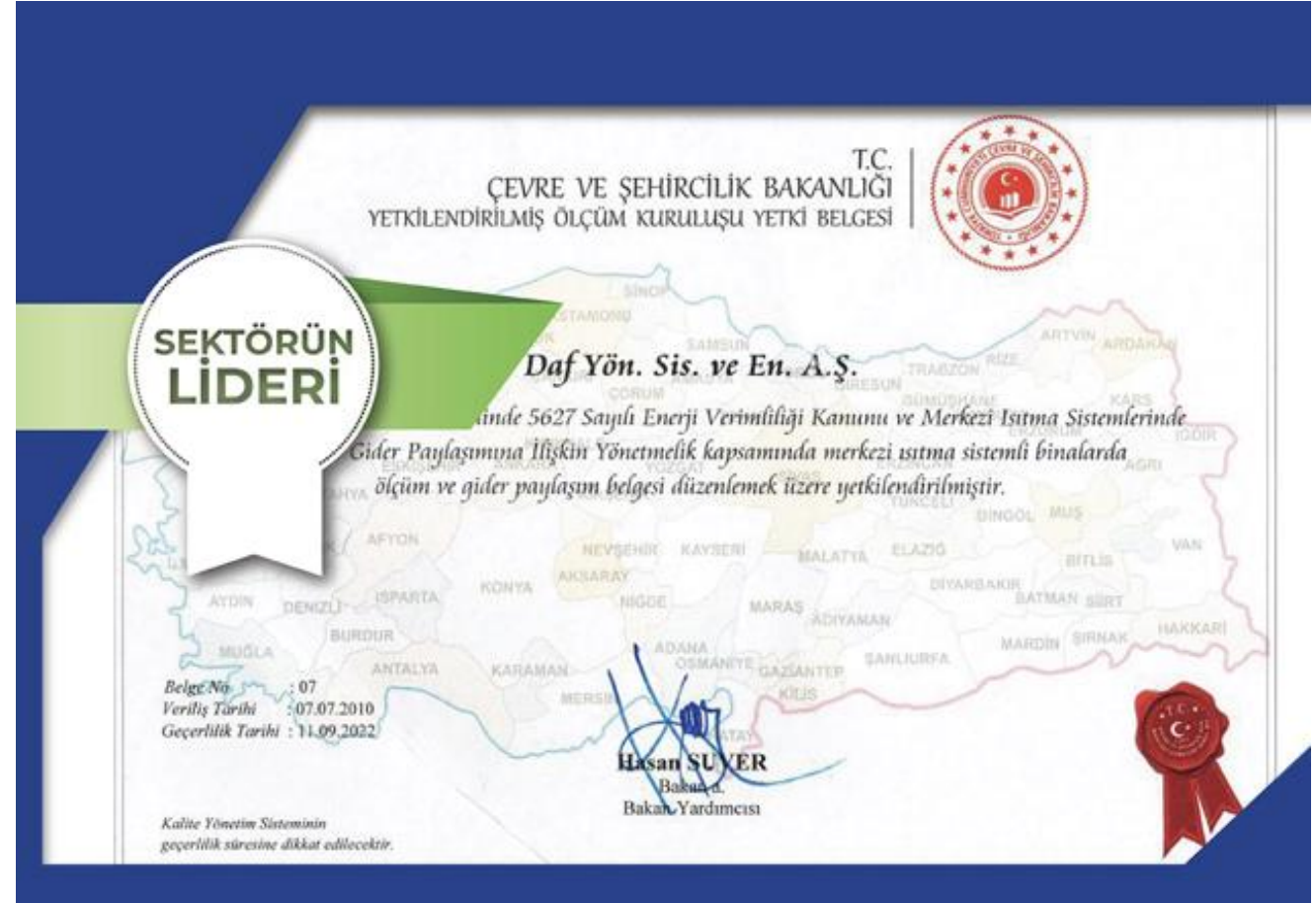


daf Energy Management Systems Inc.

About Our Company

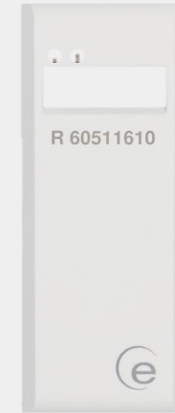


- **DAF Management Systems and Energy Inc.** was established in Istanbul in 2009 and is a respected company and one of the market leaders in Turkey in its field.
- With a team of **35 employees**, the company supplies heat, water, and electricity meters as well as the communication technologies used by these meters. It also provides installation, commissioning, meter reading, and billing services.
- As a **government-authorized metering and implementation company**, DAF has delivered products and services for both public and private sector projects.
- This experienced team is capable of providing services for all types, brands, and models of metering and communication equipment under all conditions.



Products

- Proven in field applications,
- Fully compatible with each other,
- Compliant with international standards and European regulations,
- Compliant with international health, metering, and communication standards.



SinerjiPro

daf enerji yönetimi

Sensostar U



The German **SensoStar U** is one of our latest generation compact meters. Using advanced ultrasonic measurement technology, it delivers highly precise measurement results.

Whether used as a **heating meter**, **cooling meter**, or **hybrid (heating/cooling) meter**, SensoStar U provides high measurement accuracy and numerous advantages.

With a wide range of **sizes and dimensions**, it offers modular solutions for different communication interfaces, ensuring high flexibility in operation, installation, and data communication. Wireless **M-Bus radio communication** allows data transmission at user-defined intervals, enabling the transfer of up to **15 monthly or half-monthly data records**.

In addition to integration with **AMR (Automatic Meter Reading) systems**, it also supports easy **walk-by (mobile) reading**. **OMS-compatible radio communication**, with **Mode 5 or Mode 7 encryption**, guarantees secure transmission of measurement data.

daf sonic



The **ultrasonic measurement technology** provides high precision, long-term stable readings, and easy installation.

When integrated with radio communication, it becomes a highly efficient solution for **collecting consumption data**.

With a **short and stable measurement cycle every 12 seconds** (or optionally every 4 seconds with a 7-year battery), the device supports a **dynamic measurement range of up to 1:250**, achieving **Class 2 measurement accuracy**.

The compact design, removable calculator unit, and **top-mount installation option** provide flexible installation even in limited spaces.

ELF 2



ELF 2 is the latest model in the new generation of compact **Elf meter series**.

Thanks to its **single-jet electronic design**, it provides **Class 2 measurement accuracy** according to the **PN-EN 1434 standard**.

ELF 2 stands out with its **compact and modern design**. With its advanced functions and communication capabilities, it can be used as both a **heating and cooling meter**. It ensures reliable operation with **dynamic integration technology** and a **12-year battery life**.

With **flexible communication options** and **interchangeable communication modules**:

- Water meter data can be read via **RF Wireless M-Bus (with two pulse inputs)**.
- Data can also be read via the **RS485 line using the Modbus protocol**.

Q Caloric 5,5

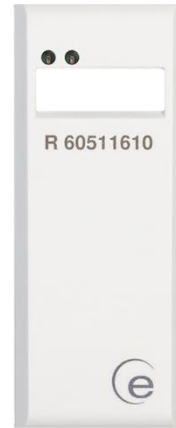


Every year, more than **4 million Q Caloric 5.5 heat cost allocators** are manufactured in Germany and distributed worldwide.

The **Q Caloric 5.5** represents the latest level of technology and offers a wide range of applications globally. It can be used with **all types of radiators**.

Thanks to the **integrated radio module**, consumption data can be read remotely, enabling cost allocation without disturbing building occupants.

HCA e2



An **electronic heat cost allocator** that enables the transmission of up to **15 monthly and semi-monthly values via radio communication**.

With **OMS-certified radio communication**, consumption data can be easily collected through **walk-by reading** or **AMR (Automatic Meter Reading) systems**.

In addition, the **HCA e2** features an **optical interface**, allowing individual device configuration.

With the capability to store **132 monthly and semi-monthly records (11 + 1 years of usage data)**, the HCA e2 provides a **durable and reliable solution for consumption data collection**.

EITN 40



EITN 40 is a modern electronic device designed for **fair allocation of heating costs in buildings with central heating systems**.

The **E-ITN 40** heat cost allocator uses a **dual-sensor measurement principle**:

one sensor measures the **radiator temperature**, while the other measures the **ambient room temperature**.

Thanks to this principle, the device accurately measures consumption **only when the radiator is actively emitting heat**, ensuring reliable results.

For billing calculations, the following averages are used:
Average room temperature for the annual billing period
(current year + previous year)

Average room temperature for the last monthly billing period
(current month + previous 12 months)

Smart JS Series



DAF Smart JS is a compact water meter designed to measure hot and cold water consumption.

Flow values can be determined through the **roller-type mechanical display** and a **magnetic scanning system**.

The **dry-type turbine design** prevents contact between water and the display mechanism, ensuring **higher measurement accuracy and longer service life**.

The device is equipped with **advanced technology capable of detecting internal water leaks and tampering attempts**, recording such events as alarms.

Measured consumption and flow data can be read remotely via **wired or wireless M-Bus communication systems**, allowing meter reading without disturbing building occupants.

SJ Plus EVO



SJ Plus / Evo is a new generation **single-jet water meter series** developed for residential applications.

A **high-capacity automated production line** combines large production volumes with top-level quality.

SJ Plus / Evo provides **excellent metrological performance** within its category.

It can be equipped with **remote data communication technologies**.

Superdry single-jet meter for hot and cold water

Ideal for **apartment-level or building sub-metering applications**

MID approved: R max. 160 / DN: 15–20

Certified according to many international health standards

360° rotating meter head

High protection against **external magnetic interference**

Compatible with **wired or wireless communication modules**

High Capacity



High-capacity meters are available in **DN25 to DN200 sizes**, designed with **robust protection and large flow capacity**. Approved by many health authorities.

Depending on measurement accuracy requirements, they are available with:

- **Multi-jet technology**
- **Volumetric technology**
- **Ultrasonic measurement technology**

MID certified (Italy).

Compatible with **all types of connection systems**.

GSM Remote Reading M-Bus Converter



DAF GSM provides a transparent communication solution supporting **up to 250 M-Bus devices**.

With **USB and GSM modules**, it offers flexible solutions for many applications, especially **remote meter reading**.

Features:

RS485 / RS232 data transmission with automatic direction detection

Supports up to **250 connectable M-Bus devices**

Short-circuit protected **integrated M-Bus line**

Power supply: 90–250V~, 50–60Hz

Suitable for **DIN rail mounting**

Modern and convenient **web interface management**

Expandable network structure with **repeater (signal repeating) functionality**

Greater flexibility and performance compared to previous generation devices

Wireless M-Bus Walk-by Data Collector



AMB8465-M is a simple and effective **data collection solution for wireless meters**.

Compatible with **S1, T1, and C1 radio modes**, ensuring suitability for different applications.

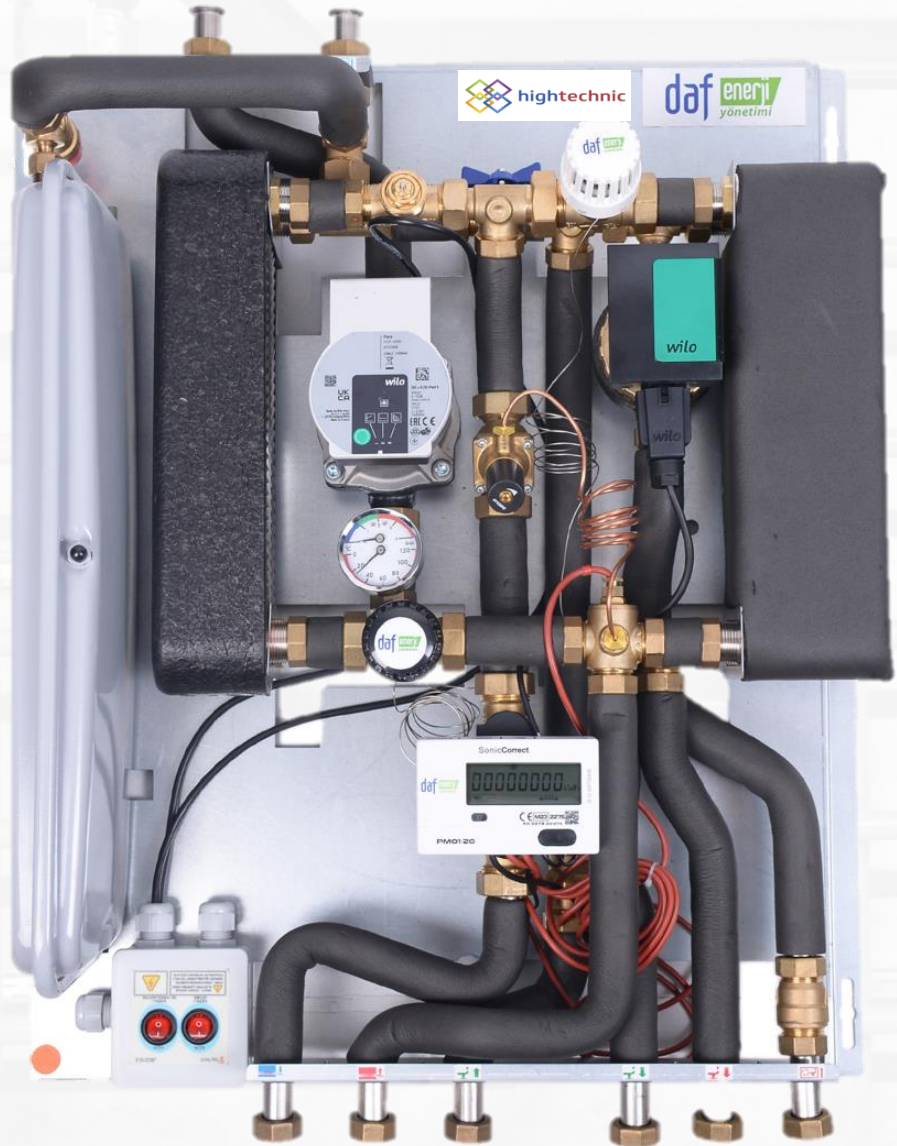
- Simply plug into a **USB port** for fast and easy installation
- Ideal for **walk-by (mobile meter reading) applications**

Wired Wireless M-Bus Remote Reading Gateway



CMeX50, part of the **Elvaco CMe series gateway devices**, provides communication with **wireless M-Bus meters**.

- Supports management of up to **800 wireless M-Bus meters**
- Secure data transmission with **separate encryption keys**
- Can connect wirelessly to other **CME / CMeX devices via IR interface**
- Durable polyamide enclosure ensures **resistance to harsh outdoor conditions**
- **Compact and lightweight design** for easy installation
- **LCD display** provides instant status information
- **Backlit 7-button keypad** allows control of various functions



HEAT INTERFACE UNITS

- A **heat interface unit (HIU)** is a multifunctional device installed separately in each apartment in buildings supplied by a **central heating system**. It prepares domestic hot water using the **instantaneous heating principle** and controls the heating system.
- The HIU produces hot water through a **plate heat exchanger**. Hot water from the central heating system and cold water from the network flow through different channels of the heat exchanger, where **heat transfer takes place**.



Efficiency & Comfort

Our heat interface units feature advanced control systems that allow **temperature adjustment between 20–70°C**. They maintain a **stable hot water temperature**, unaffected by flow variations. This eliminates waiting time and ensures **instant hot water availability**.



Health-Focused Design

The system prepares **domestic hot water instantly without storage**. This eliminates the risk of **Legionella bacteria**, protecting the health of building occupants.



Economic Advantages

With the **DAF Heat Interface Unit**, there is **no need for additional equipment**, such as:
Boilers
Hot water circulation pumps
Hot water meters
This provides **installation savings, cost advantages, and longer system life**.

Özel MicroPlate Tasarımlı Yüksek Verimli Eşanjör;

DAF Enerji sektöründe en yüksek plaka sayısına sahip eşanjör kullanımı ile yazın düşük kazan sıcaklıklarında çalışma imkanı sağlamakla kalmayıp kışları da verimli ve konforlu bir kullanım sıcak suyu üretmektedir.

Oransal Kontrol Konforunuzun Güvencesi;

DAF Regülatör ile kullanım suyu ihtiyacına bağlı olarak oransal kontrol yapılır. Sıcak su ihtiyacı bittiğinde regülatör, eşanjöre yönlendirmeyi durdurur ve enerji kaybı engellenir.

Kaliteli Malzeme;

DAF Enerji ısı istasyonlarında tüm borular AISI 316 Paslanmaz çelik malzemeden üretilir ve özel izolasyon malzemesi ile kaplanarak ısı kayıpları önlenir.

Okuma-Paylaştırma;

Kalorimetreler gibi soğuk su sayaçları da ısı istasyonu içerisinde kullanarak kullanılarak hem yerden tasarruf yapılır hem de m-bus / radyo frekans arayüzleri ile kusursuz bir okuma-paylaştırma sağlanır.



Sıcaklık Kontrolü ve Güvenlik;

DAF Enerji Isı İstasyonlarında kullanılan termostatik vanalar sayesinde istediğiniz sıcaklıkta kullanım sıcak suyunu üretebilir, ayrıca set değeri koyarak haşlanma riskini ortadan kaldırebilirsiniz.

Hidrolik Denge;

Hidrolik kontrollü ısı istasyonlarında kazan dönüş hattında kullanılan DN25 Fark Basınç Vanası sayesinde her daire bazında mükemmel bir balanslama yapılmış olur ve bina katlarında ekstra bir balans vanasına gerek kalmaz.

Montaj ve İşçilik Kolaylığı;

Her projeye özel olarak tasarlanan ısı istasyonları, ayarlanabilir giriş-çıkış ağızlarıyla rahatlıkla monte edilebilir ve bakımı yapılabilir. Boylerli sistemlerden farklı olarak ısı istasyonuna getirilen sadece üç hat (Kazan gidiş-dönüş ve şebeke suyu) ile rahatlıkla her projede kullanılabilir.

Tüketim Değerlerinin Doğru Ölçülmesi;

Kullanılan yüksek hassasiyetli kalorimetreler sayesinde tüketim değerleriniz doğru okunur ve adilce paylaşılır. Ayrıca boilerli sistemlerde kullanılan sıcak su sayaçlarına gerek yoktur.

Advantages of the Heat Interface Unit

Comparison of Key Characteristics

In-apartment safety (combustion process, carbon monoxide risk)

Adaptation to different building types

Compatibility with different energy sources (geothermal, district heating, etc.)

Domestic hot water comfort

Health (Legionella risk)

Investment advantage

Energy efficiency

Ease of operation and maintenance

Compact installation and space saving

Ease of installation

Installation cost

Boiler System

Heat Interface Unit System



DafSmart® — Everything You Need to Manage the System

Developed based on our extensive experience, the **DafSmart® platform** has the capability to analyze and report **large volumes of meter data with daily resolution**.

Thanks to our **user-friendly, informative, and elegant interfaces**, individual users can easily monitor their **consumption and billing information**.

In addition, the **DafSmart® platform**:

- Is **fully compliant with the European Energy Efficiency Directive**,
- Offers the flexibility to operate seamlessly in **Turkic Republics and Arab countries**.

Login

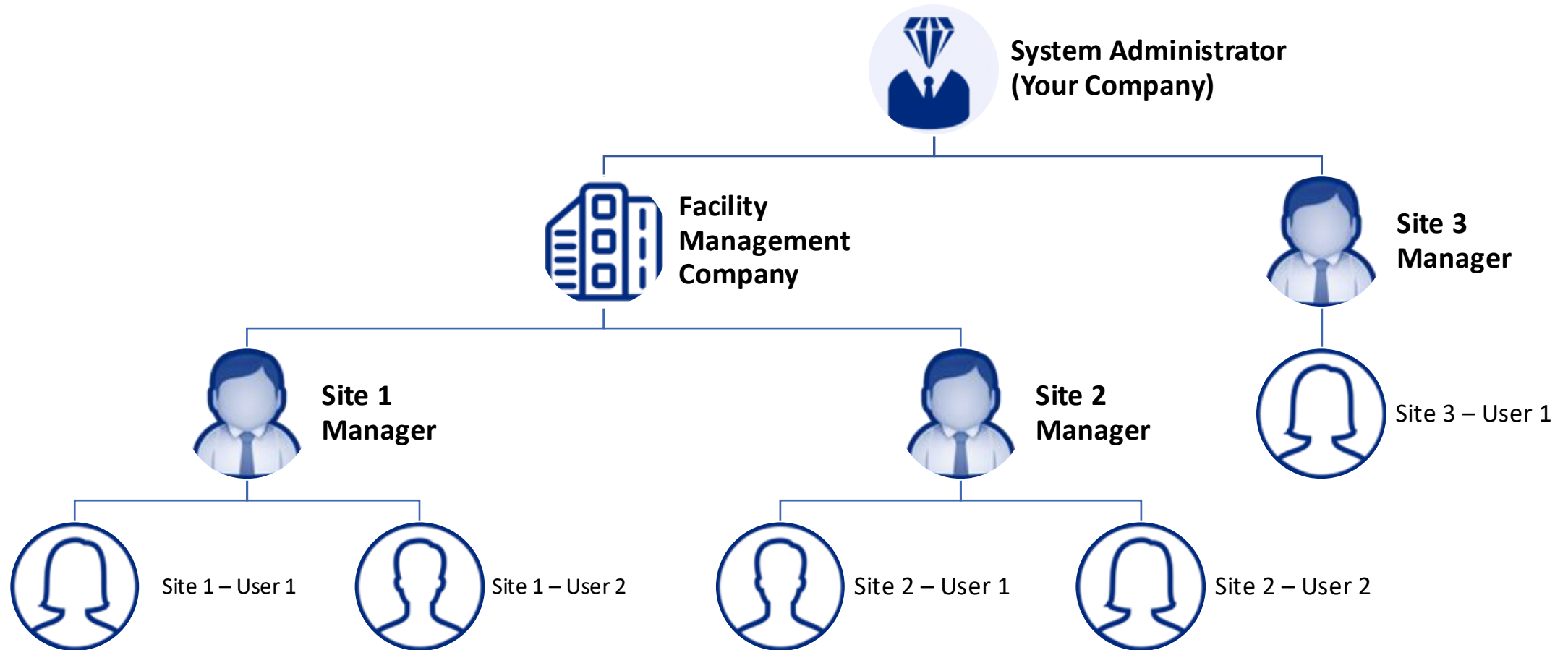
You must be login in to enter to the system

Login

Do not remember your password?

Reset

Who Uses the Platform?



User Login Screen

- System Administrator
- Facility Management Companies,
- Site Managers
- **Apartment Residents**
(Tenants / Property Owners)

All users access the system through the **same login interface** and manage the **buildings and apartments** they are authorized for according to their assigned roles.

Login
You must be login in to enter to the system

Username / E-Mail

Password

Login

Do not remember your password?
Reset

2023 © Daf Energy Management
All rights reserved



Login
You must be login in to enter to the system

Username / E-Mail
PanoramaYonetim

Password
.....

Login

Do not remember your password?
Reset

2023 © Daf Energy Management
All rights reserved



Welcome
Panorama Yönetim
Site Manager

Project 11 Independent Section 3534

Projects

Projects	Detail
ARCAN APARTMANI	Detail →
DUMANKAYA KONSEPT HALKALI TOPLU YAPI	Detail →
ADRES KORU EVLERI	Detail →
AND PASTEL	Detail →
MAVİ İSTANBUL	Detail →
EMLAK KONUTLARI NIĞDE	Detail →

Independent Units | Apartments, Commercial Spaces



On the **apartment navigation screen**, search filtering can be performed according to the following criteria;

- By user
- By building
- By apartment number

PROJECT: ARCAN APARTMANI

Project Information

Project Name
ARCAN APARTMANI

Number of Independent Sections
22

Country / City
Türkiye / İstanbul

Meter Types
Fuel

Billing Day
1. day of every month

Is the service fee included?
Yes, (23.303766101695 TL + VAT = 27.964519322034 TL)

Independent Section - Passwords

Independent Section

Filter

Show 10 entries



Billing Day
1. day of every month

Is the service fee included?
Yes, (23.303766101695 TL + VAT = 27.964519322034 TL)

Independent Section - Passwords

Independent Section

Filter

Show 10 entries

	#	Independent Section	
+	155850	001	Detail →
+	155851	002	Detail →
+	155852	003	Detail →
+	155853	004	Detail →
+	155854	005	Detail →
+	155855	006	Detail →
+	155856	007	Detail →
+	155857	008	Detail →
+	155858	009	Detail →
+	155859	010	Detail →

Showing 1 to 10 of 22 entries



Meter Types
Fuel

Billing Day
1. day of every month

Is the service fee included?
Yes, (23.303766101695 TL + VAT = 27.964519322034 TL)

Independent Section - Passwords

Independent Section

Filter

#

Independent Section

004

Filter

Clear

Show 10 entries

	#	Independent Section	
+	155853	004	Detail →

Showing 1 to 1 of 1 entries (filtered from 22 total entries)

Overview of an Apartment

Welcome

Project: Panorama Y... 11
Independent Section: 3534

Project / Independent Section

AND PASTEL - Y1 Blok 1 - 005

Project

Project Name: AND PASTEL
Country / City: Türkiye / İstanbul

Independent Section

Independent Section M2
Y1 Blok 1 - 005 176.64m²

Measurement Information | Expense Sharing | Bills | Interim Invoices

Measurement Data

Cold Water 140421

179447 l
In the last 30 days: 6413 l
In the last 7 days: 1333 l
In the last 24 hours: 209 l

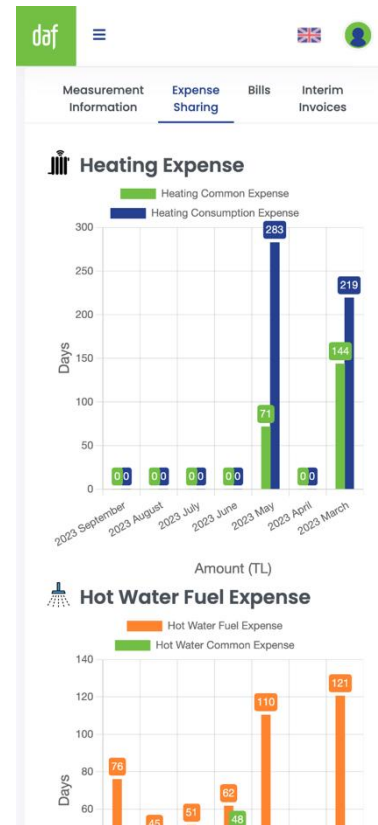
Hot Water 152338

95864 l
In the last 30 days: 3408 l
In the last 7 days: 651 l
In the last 24 hours: 120 l

Heating 73402208

14812 kWh
In the last 30 days: 195 kWh
In the last 7 days: 90 kWh
In the last 24 hours: 8 kWh

Invoices



Invoice History

Period	Amount to be paid
September 2023	1,163,48 TL
August 2023	1,112,76 TL
July 2023	893,87 TL
June 2023	930,92 TL
May 2023	1,262,48 TL
April 2023	836,68 TL
March 2023	1,458,49 TL
February 2023	1,160,28 TL
January 2023	821,61 TL

Period	Amount to be paid
December 2022	961,18 TL
November 2022	517,10 TL
October 2022	403,81 TL
September 2022	387,96 TL
August 2022	280,41 TL

Invoice Example

EXPENSE SHARING DOCUMENT

AND PASTEL
Y1 Blok 1 - 005

Area (m ²)	176.64
Total Expense	422,62 ₺
Service Costs	4,7593220338983 ₺
Sosyal_tes_Ort_Alan_Gld	10,15 ₺
Ortak_Alan_Elk	565,88 ₺
Ortak_Alan_Su	160,06 ₺
Amount to be paid	1.163,48 ₺
Due Date	31.10.2023

HEAT COST ALLOCATION

Read Date 1	Read Date 2	Days	Total Expense
27.09.2023	27.10.2023	30.0	8,765,40 ₺

	Fixed Cost	Variable Cost
Total Shares	885,00 ₺	7,880,40 ₺
Total Unit	23.080,83 m ²	1,083,06 m ³
Your Unit	176,64 m ²	3,71 m ³
Your Cost	6,77 ₺	75,89 ₺

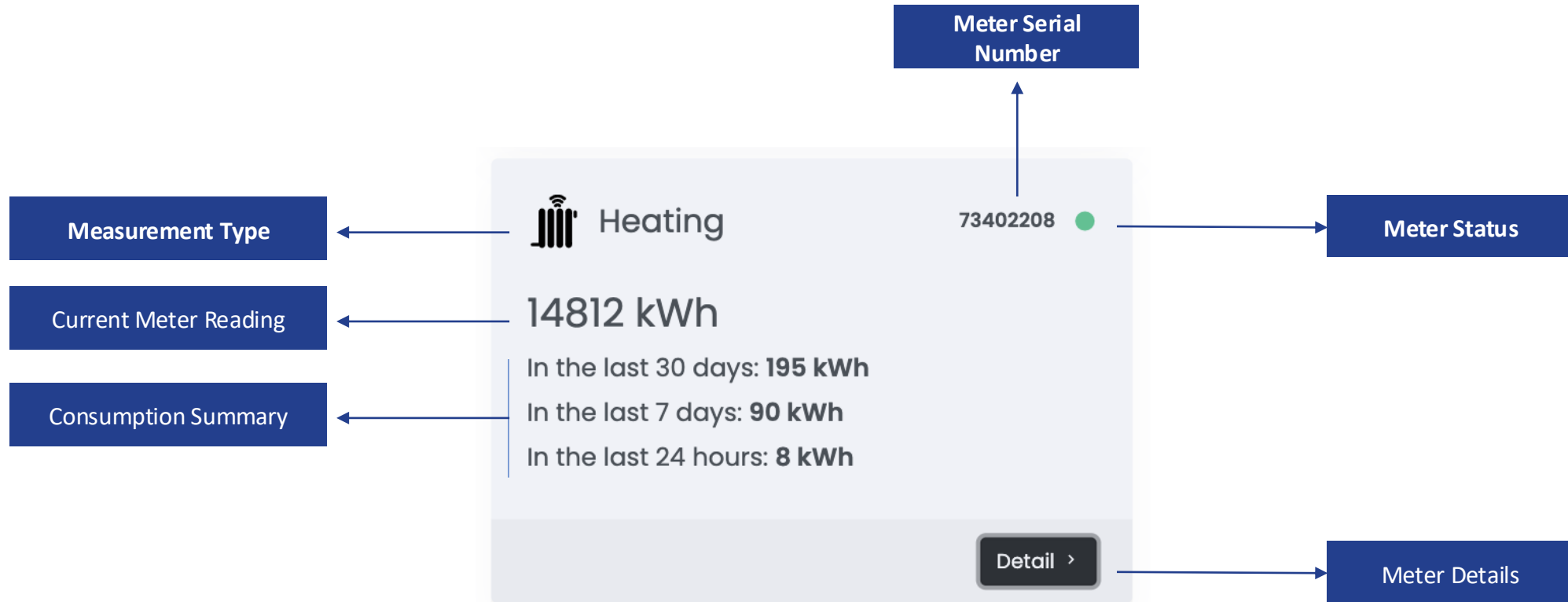
WATER COST ALLOCATION

Read Date 1	Read Date 2	Days	Total Expense
27.09.2023	27.10.2023	30	0,00 ₺

	Hot Water Expenditure	Cold Water Expenditure
Total Shares	35.066,30 ₺	101.101,75 ₺
Total Unit	1,083,06 m ³	3.122,64 m ³
Your Unit	3,71 m ³	6,79 m ³
Your Cost	120,12 ₺	219,84 ₺

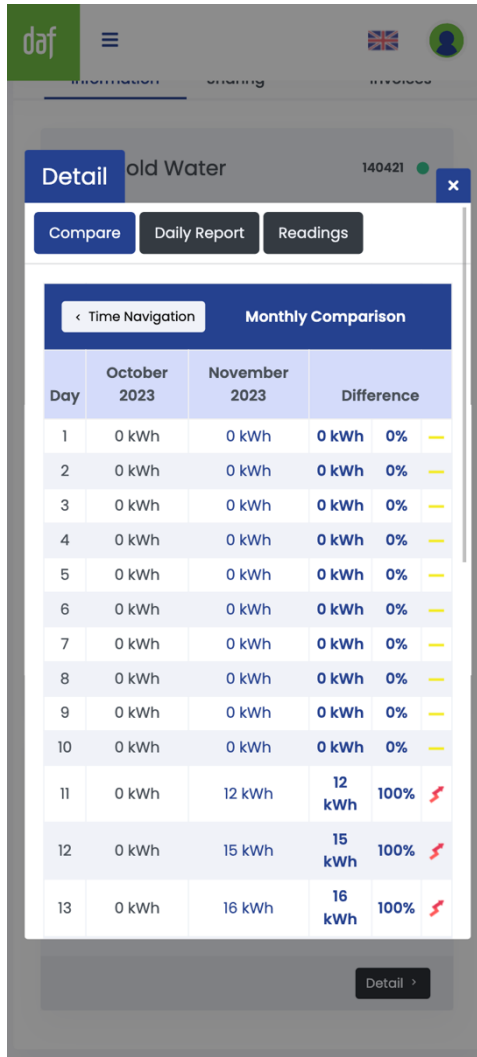
Detailed Metering Information

Overview of a Measurement Device

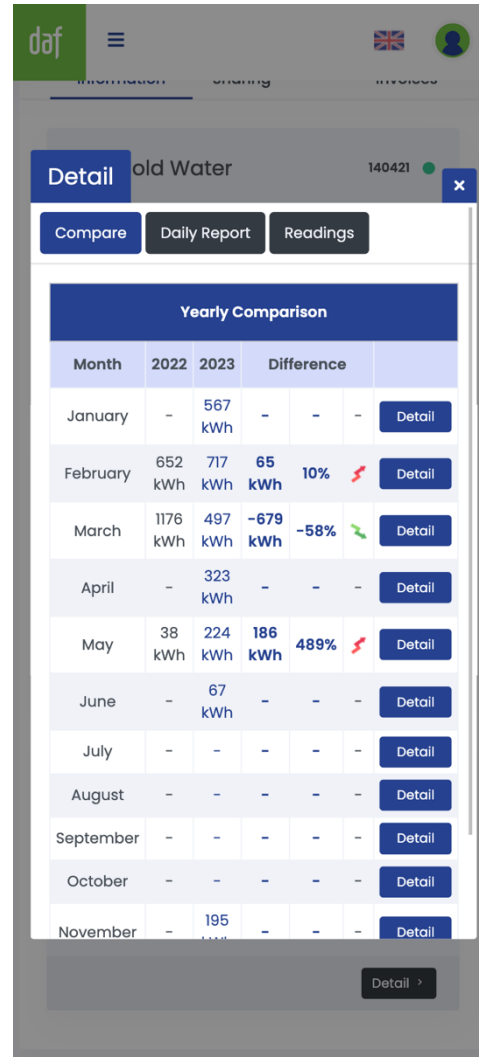


Measurement Details for a Meter

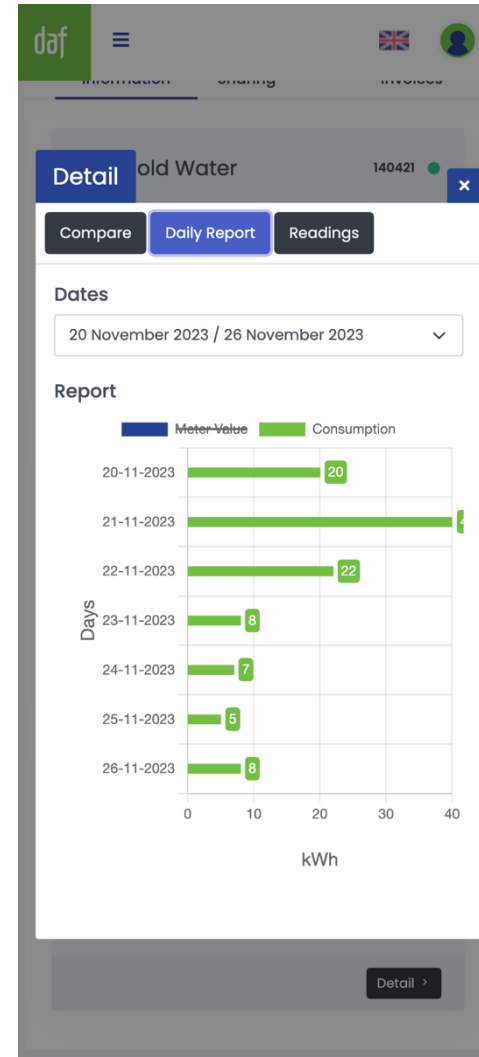
Daily Consumption Comparison Within the Same Month



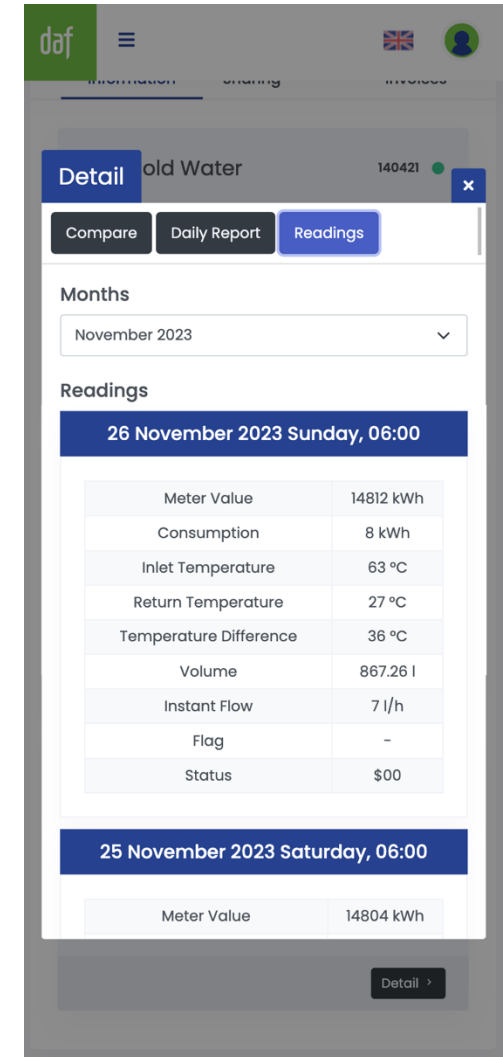
Monthly Consumption Comparison Throughout the Year



Daily Consumption Graph by Weeks

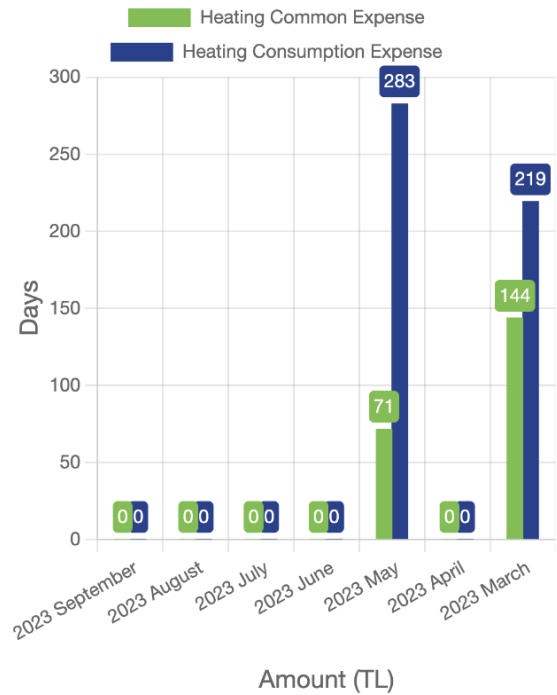


Detailed Reading Data

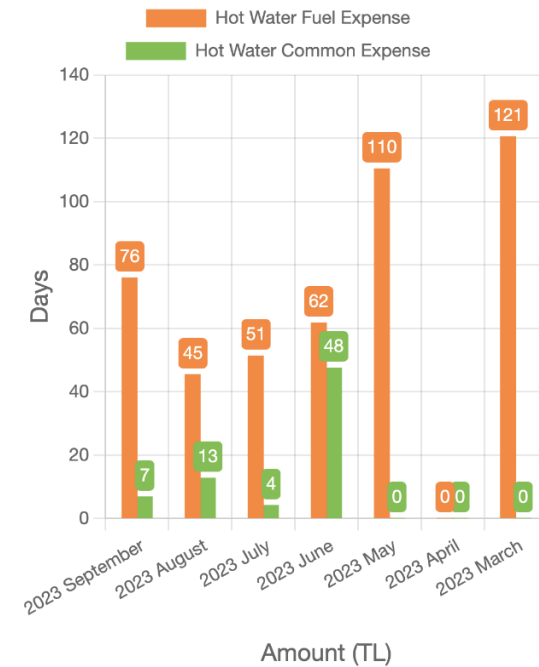


Apartment Expense Analysis

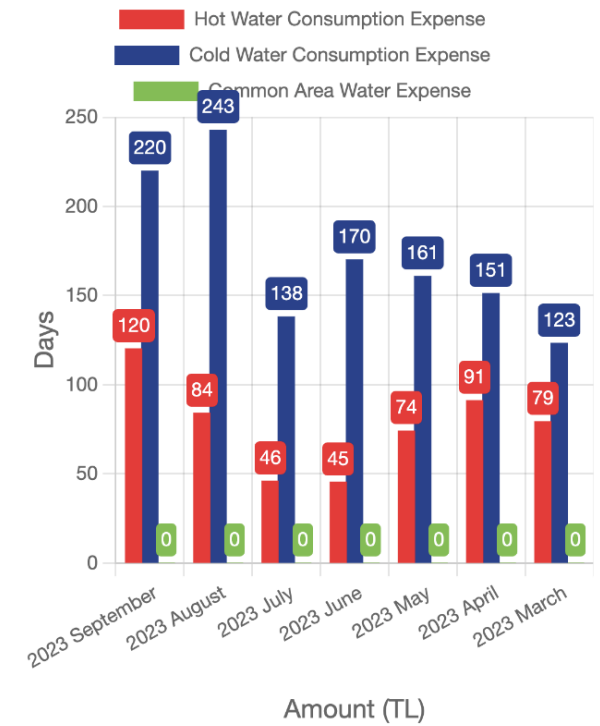
Heating Expense



Hot Water Fuel Expense



Water Expenditure



Complete Historical List of Expenses for an Apartment

Measurement Information
Expense Sharing
Bills
Interim Invoices

2023

Period	Amount to be paid	
September 2023	1.163,48 TL	Detail →
August 2023	1.112,76 TL	Detail →
July 2023	893,87 TL	Detail →
June 2023	930,92 TL	Detail →
May 2023	1.262,48 TL	Detail →
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January 2023	821,61 TL	Detail →

2022

Period	Amount to be paid	
December 2022	961,18 TL	Detail →
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September 2022	387,96 TL	Detail →
August 2022	280,41 TL	Detail →



EXPENSE SHARING DOCUMENT

AND PASTEL
Y1 Blok 1 - 005

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Ortak_Alan_Elk	565,88 ₺
Ortak_Alan_Su	160,06 ₺
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HEAT COST ALLOCATION

Read Date 1	Read Date 2	Days	Total Expense
27.09.2023	27.10.2023	30.0	8.765,40 ₺

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Total Shares	885,00 ₺	7.880,40 ₺
Total Unit	23.080,83 m ²	1.083,06 m ³
Your Unit	176,64 m ²	3,71 m ³
Your Cost	6,77 ₺	75,89 ₺

WATER COST ALLOCATION

Read Date 1	Read Date 2	Days	Total Expense
27.09.2023	27.10.2023	30	0,00 ₺

	Hot Water Expenditure	Cold Water Water Expenditure
Total Shares	35.066,30 ₺	101.101,75 ₺
Total Unit	1.083,06 m ³	3.122,64 m ³
Your Unit	3,71 m ³	6,79 m ³
Your Cost	120,12 ₺	219,84 ₺

Detailed Metering Information

Meter 1	
Serial No	: 73402208
Media	: Kalorimetre
First Index	: 14.617,00
Last Index	: 14.617,00
K Factor	: 1,000000
Consumption	: 0,00
Unit Cost	: 0,000000 ₺
Cost	: 0,00 ₺
State	
Application Code	

Meter 2	
Serial No	: 152338
Media	: Sıcak su
First Index	: 88.670,00
Last Index	: 92.380,00
K Factor	: 1,000000
Consumption	: 3.710,00
Unit Cost	: 0,032377 ₺
Cost	: 120,12 ₺
State	
Application Code	

Meter 3	
Serial No	: 152338
Media	: Sıcak Su Yakıt
First Index	: 88.670,00
Last Index	: 92.380,00
K Factor	: 1,000000
Consumption	: 3.710,00
Unit Cost	: 0,020455 ₺
Cost	: 75,89 ₺
State	
Application Code	

Meter 4	
Serial No	: 140421

Meter 3	
Serial No	: 152338
Media	: Sıcak Su Yakıt
First Index	: 88.670,00
Last Index	: 92.380,00
K Factor	: 1,000000
Consumption	: 3.710,00
Unit Cost	: 0,020455 ₺
Cost	: 75,89 ₺
State	
Application Code	

Meter 4	
Serial No	: 140421
Media	: Soğuk su
First Index	: 166.107,00
Last Index	: 172.897,00
K Factor	: 1,000000
Consumption	: 6.790,00
Unit Cost	: 0,032377 ₺
Cost	: 219,84 ₺
State	
Application Code	

For your information

The energy / water expenses calculated for your flat are determined as a result of the division of the central system water / natural gas bill accrued to your building among the flats.

In order to save more on your energy / water expenses, to use the system more accurately and efficiently, to get more information about the calculation details, we recommend you to watch the videos on the Daf Energy Management channel on Youtube.

In order to use the heat in a balanced way and to observe the rights of the neighboring apartments, the room temperatures should be adjusted to be at least 15 C.

This document has been prepared to present the share of the flat due to the cost allocation

"The content in this Notice has been prepared in accordance with the principles of "Regulation No. 26847 on the Distribution of Central Heating and Sanitary Hot Water Expenses in Central Heating and Sanitary Hot Water Systems".

End-to-End Solution from Meter to Billing

Meter Data Collection



- Collecting and managing data from **all types of devices**, either **wired or wireless**

Data Validation and Analysis



- Detects anomalies in the **measurement system**, including:
 - Errors
 - Tampering attempts

Alerts the system

Prepares data for billing

Billing

A screenshot of a utility bill from DafSmart. The bill is in Spanish and shows a total amount to be paid of 1,032.46 €. The bill includes a table with columns for 'DESCRIPCIÓN', 'CANTIDAD', 'UNIDAD', 'PRECIO', and 'IMPORTE'. The table lists various services and their corresponding charges.

DESCRIPCIÓN	CANTIDAD	UNIDAD	PRECIO	IMPORTE
CONSUMO DE ENERGÍA ELÉCTRICA	1000	KWH	0.85	850.00
CONSUMO DE GAS	100	M3	10.00	1000.00
CONSUMO DE AGUA	100	M3	10.00	1000.00
CONSUMO DE GASES	100	M3	10.00	1000.00
CONSUMO DE SERVICIOS	100	M3	10.00	1000.00
CONSUMO DE TELEFONÍA	100	M3	10.00	1000.00
CONSUMO DE INTERNET	100	M3	10.00	1000.00
CONSUMO DE TV	100	M3	10.00	1000.00
CONSUMO DE OTROS SERVICIOS	100	M3	10.00	1000.00
Importe Total A Pagar				1.032,46 €

- Billing must be carried out in accordance with the **regulations of the relevant country**.
- Our **experienced and professional team** can complete the billing process **on your behalf within a maximum of 2 days**.
- You may also continue the billing process using a **third-party application** if preferred.
- Thanks to **DafSmart API integration**, the billing process runs **seamlessly on the DafSmart platform**.

Can DafSmart Be Integrated with Other Applications?

DafSmart is not only an information platform; it also provides an infrastructure that can be easily integrated with other applications.

For example:

If you already have a **building management software**, you can integrate apartment **meter data, consumption information, and billing processes** into your system.

You can even **redirect users directly to DafSmart pages through short links within your application.**

Advanced Solutions

Should Only DAF Network Gateways Be Used for Automatic Meter Reading?

No. DafSmart can collect data from **all network gateways that support open reading protocols**.

Compatible manufacturers include **Engelmann, Qundis, Weptech, and Elvaco**, among others.

The devices supplied by **DAF** are simply intended to **simplify implementation and operation** (and also provide cost advantages).

Can Projects Using Walk-by or Manual Reading Methods Also Be Included in the System?

Yes, they can.

DafSmart can process data generated by many **walk-by software solutions** (e.g., **Engelmann Readout, Qundis ACT46, Apator Radio Admin**).

When these files are placed in a designated folder, the system **automatically imports them through hourly scans**.

Meters read manually using **Excel or CSV files** can also be automatically transferred into the system.

Additionally, **handheld terminals** can be integrated for this purpose.

Can External Billing Data Be Added to DafSmart?

Yes, it can.

Similar to meter data transfers, you can upload **billing tables prepared in another application or in Excel** into DafSmart.

If your software supports it, a **fully integrated system** can also be established.

Furthermore, the **DAF expert team** can provide support services for these integrations, usually at **more cost-effective rates than typical internal implementation costs**.

Which Meter Types Are Supported?

DafSmart supports **all meter types compliant with the Open Metering System (OMS) standard**, including:

- Heat meters
- Heat cost allocators
- Electricity meters
- Water meters

These can be **wired or wireless**.

-  Heating | **Calefacción**
-  Water | **Agua**
-  Hot Water | **Agua Caliente**
-  Cooling | **Refrigeración**
-  Electricity | **Eléctrico**



PROFESSIONAL EXPENSE ALLOCATION (BILLING) SERVICES



- The expert team of **Daf Energy Management** prepares the building invoices you submit based on **your meter data**.
- The invoices are prepared **in compliance with regulations and your contractual conditions**, and delivered **within a maximum of 2 days**.



Data Security

- Consumption data obtained from **all devices**, including **heat meters and hot/cold water meters**,
- Regardless of the **reading method**,
- Is stored in compliance with **GDPR (General Data Protection Regulation)** and **confidentiality agreements**,
- On our **secure cloud servers** for a minimum of **10 years**.



Data Validation

- Consumption data obtained from **metering devices** is analyzed using **multiple criteria**, and the results are shared with **facility management**.
- **Possible findings include:**
 - Metering devices may be **malfunctioning**,
 - Due to **incorrect installation**, consumption may be measured **inaccurately or excessively**,
 - There may be **water or electricity leakage** within independent units,
 - **Unauthorized user interventions** may have occurred,
 - The **central heating boilers** may be operating **inefficiently** or there may be **system leaks**, which can **increase the building's energy costs**.



Billing Allocation Process

- After the data has been analyzed for **errors, malfunctions, and possible interventions**, the **central system natural gas, water, and electricity bills** submitted by the building manager are allocated in **accordance with applicable regulations**.
- Acting as an **authorized metering service provider**, expense allocation calculations are carried out **impartially and in full compliance with legal regulations**.



Comprehensive Solutions

Natural Gas Billing

- Domestic hot water heating shared / consumption costs
- Heating shared / consumption costs
- Social facility costs

Water Billing

- Hot / cold water consumption costs
- Common area / pool / garden irrigation / social facility costs

Electricity Billing

- Common electricity consumption costs
- Cooling (Chiller / WSHP) shared consumption costs
- Air conditioning unit shared consumption costs
- Fresh air shared and consumption costs
- Common area / elevator, etc. consumption costs
- Social area consumption costs



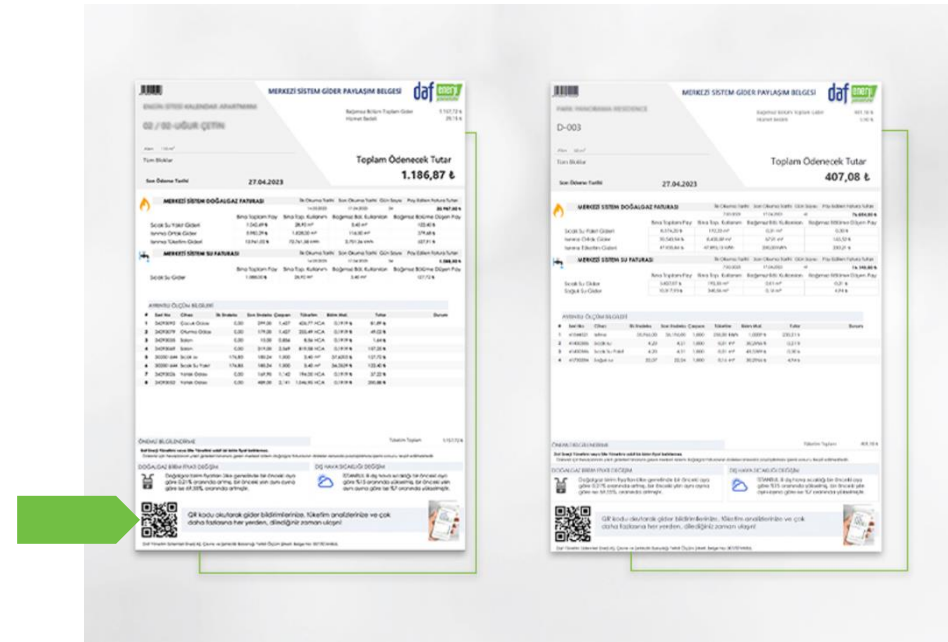
QR-Code Enabled Expense Allocation Reports

•In the expense allocation reports prepared by our team and provided to independent units, **calculation details are presented transparently and without interpretation.**

•Users can **clearly see how the building's incoming invoices are allocated and which cost items they are distributed across.**

•By scanning the **QR code**, users can **directly access the DAFSmart digital platform.**

•The reports are **customized with your company's logo.**



Result Tables

A detailed **expense distribution table** showing the meter readings, consumption charges, and expenses of all independent units is provided.

The table is prepared in **Excel format**, allowing **easy filtering and sorting**.

Using this table, building managers can:

- Identify **units with high consumption**,
- Easily detect **independent units with or without consumption**.

Additionally, this table is used for **defining and reporting expenses**.

Expense distribution tables prepared in **custom formats compatible with accounting and management software** can also be provided by our company **in various formats upon request**.





5 Levent - 2,264 flats/pisos



Aġaoġlu 1453 - 5,004 flats/pisos



Ayazma Emlak Konutları - 1,507 flats/pisos



Emlak Konut Bařakřehir - 1,774 flats/pisos



Bulvar İstanbul - 1,712 flats/pisos



Bařıřehir - 3,219 flats/pisos



Trusted as a Reliable and
Experienced Solution Partner in
Hundreds of Projects — Daf Energy



Metropol İstanbul - 1,719 flats/pisos



Evora İstanbul - 5,221 flats/pisos



Skyland - 1,654 flats/pisos



Tema İstanbul - 3,122 flats/pisos



Vadistanbul - 1,221 flats/pisos



Batumi Sunrise - 652 flats/pisos

Thank You.

