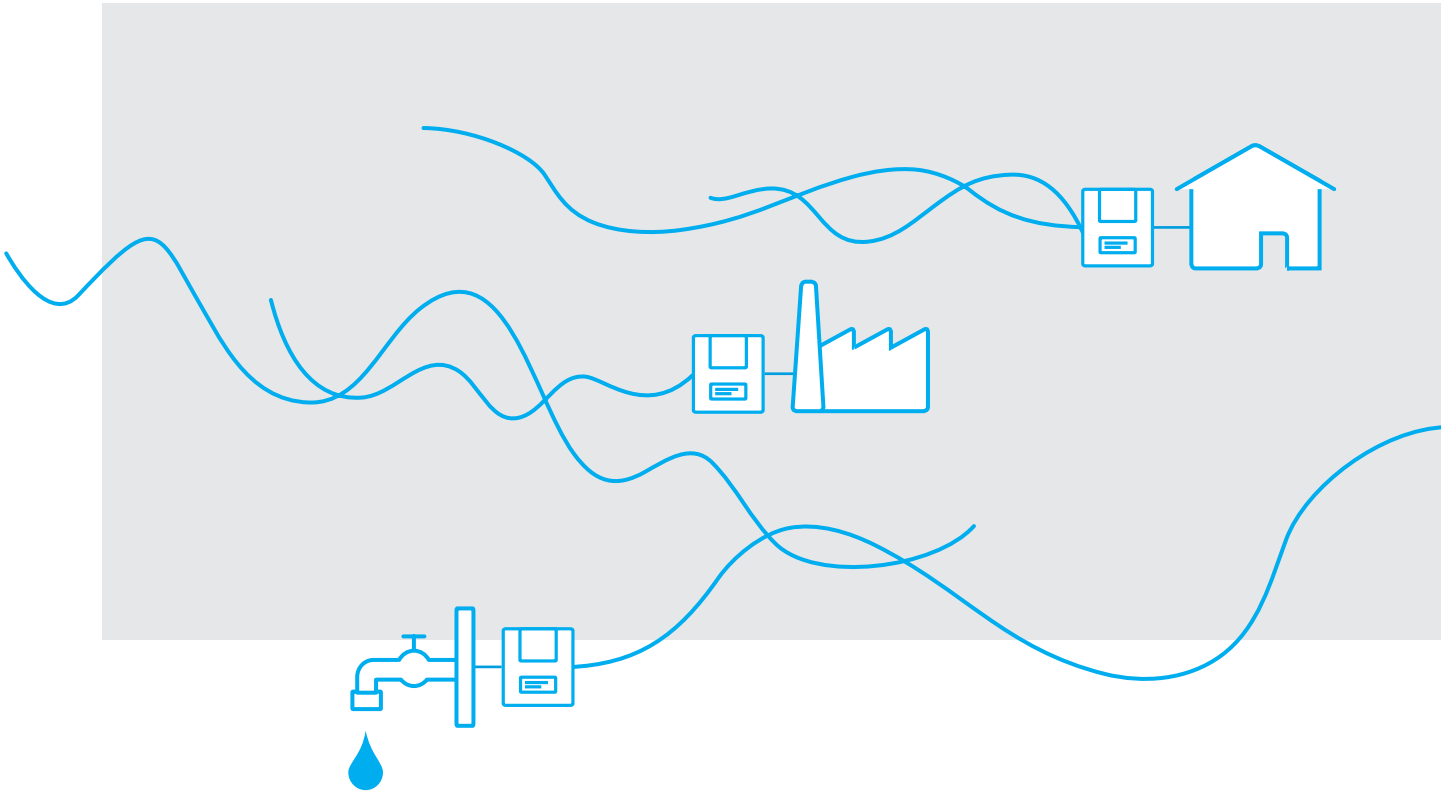
iSAtech
WATER

Prepaid Metering

Pay as you use for water, heat, gas and electricity



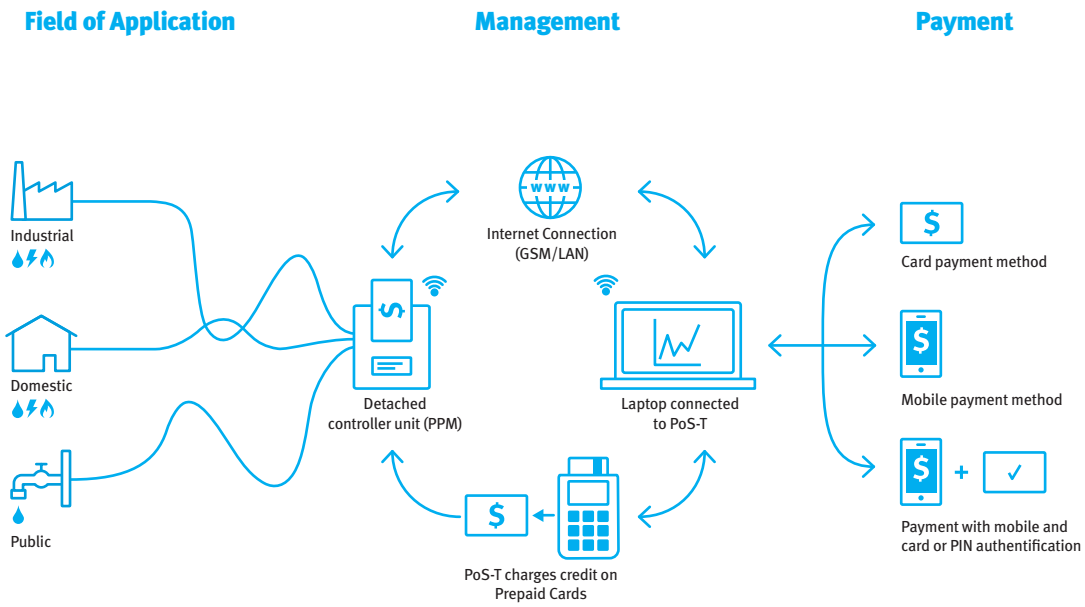
Developed in cooperation with
German Federal Ministry of
Economics and Technology

Bundesministerium
für Wirtschaft
und Technologie

How the system works

Pay as you use

The prepaid metering system of iSAtech water is an intelligent supply system which enables the sale of prepaid water, heat or electricity. Prepaid means that water, heat or electricity can be drawn at the dispensing units with a loaded prepaid credit until the credit is exhausted.



How it works

Credit can be charged on NFC-cards or purchased via mobile phone while all data is collected and managed by the software and server. At the dispensing unit, the PPM, water, electricity or heat can be received according to the credit balance. The PPM can be used in households, public places or industries.

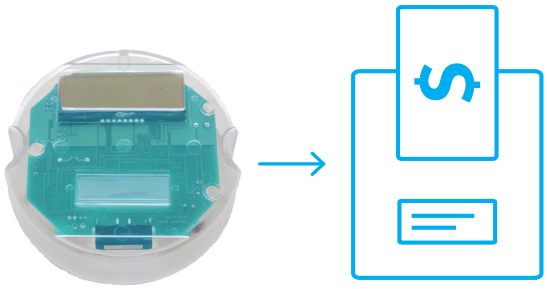
- Pay for consumed resources
- Full transparency with online logging and statistical evaluation
- Fixed rates or graduated/volume rates
- Credit on NFC cards or online via Internet/ mobile, for example M-Pesa
- Used by public standpipe, household counters and industry

Prepaid Meter Dispensing Unit

The prepaid metering system of iSAtech water is an intelligent supply system which enables the sale of prepaid water, heat or electricity.

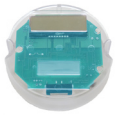
Controller Unit

The controller unit is the control center of the dispensing unit. By transferring the loaded prepaid credit onto the controller unit the valve will be opened, the meter analyzed and the valve closed again if the water credit is exhausted. The controller unit can be equipped with an internal power supply and works self-sufficient up to 8 years.



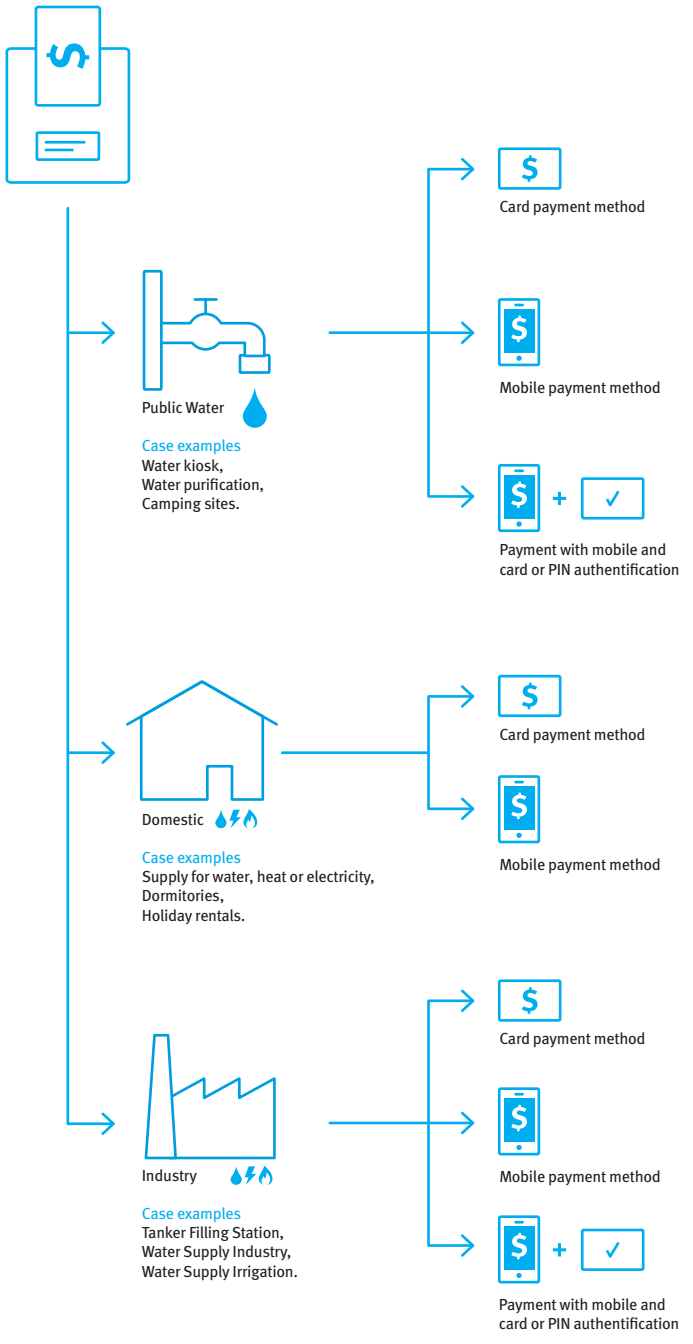
Prepaid Meter Dispensing Unit

With the principle of pay as you use the Dispensing Unit interacts with the valve and meter and becomes a complete Prepaid Dispensing Unit.

 Controller Unit	Control	Meter
Water		
Heat		
Electricity		

Field of Application

The Prepaid Meter Dispensing Unit is used in the most diverse fields of application.



- Water expenses in public places
- Multiple users per PPM device
- Credit on NFC-cards

- Buy online and use credit
- Water to public places
- Multiple users per device
- Buy credit via mobile phone

- Authentication with NFC-ID-card
- Authentication with PIN on PIN-Pad
- Online payment also without full GSM network coverage

- One user per PPM device
- Credit on cards
- Credit on Prepaid Meter Dispensing Unit (card does not need to be charged)

- One user per PPM device
- Credit can be checked/recharged online

- Sale to resellers
- Credit on card
- DN 20-200 for large quantities

- Charging and billing in real time
- Full cost and delivery control at all times
- Rates can be adjusted quickly

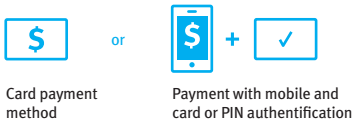
- Authentication with card on the PPM
- Authentication with PIN on PIN-Pad
- Online payment also without GSM network coverage

Public Water

The Public Water Tap varies from single installations to large-scale systems with complex distribution strategies.

Water Kiosk

A water kiosk has the function to offer water at public places. Classical examples are water filling stations, boreholes or even garden allotment areas and marinas. The prepaid water supply system ensures the accessibility to the offered water for customers.



Card payment method

Payment with mobile and card or PIN authentification

Camping Sites / Festivals

With the prepaid water supply system it is possible to organize the dispensing of water in showers or even from laundry machines at camping sites. The prices for the different dispensing points can be selected individually. For example the laundry cycle could be offered for a higher price than taking a three minute shower. Electricity could be controlled as well.

Card payment method

Water Purification

The provision of clean drinking water is a great challenge especially in developing countries. The widespread concept of the water kiosk in conjunction with the systems of water purification is an approach with guaranteed success.

Card payment method

Payment with mobile and card or PIN authentification

Domestic

The Prepaid Meter Dispensing Unit allows a significantly easier way of accounting water, heat, and electricity costs for landlords or the supplier. The costs are payed in advance by the consumer by purchasing a prepaid credit.

Domestic Supply for water, heat or electricity

The Prepaid Meter Dispensing Unit can be installed instead of the normal water meter, since it contains a standardized and calibrated water meter. It offers better control over the consumption and enables optimized budgeting.

Card payment method or Payment online

Holiday Rentals

Especially for holiday rentals with constantly varying water usage the Prepaid Meter Dispensing Unit is a good solution for a demand based settlement of water bills. In holiday complexes several different supply profiles can be operated.

Card payment method or Payment online

Dormitories

The billing of the actual consumption is often felt as more fair and transparent in hostels. Because of organizational reasons like the high fluctuation of the residents, in most cases an apportionment type of payment is chosen instead. With the iSAtech prepaid system an economic and demand based payment considering consumption only is possible.

Card payment method or Payment online

Industry

The intelligent and energy independent Prepaid Meter Dispensing Units offer great advantages for industrial use. The water balances may be acquired before consumption. Thus, a security against delay of payment is granted.

Tanker Filling Station

In many places water tanker vehicles accomplish the essential task of the water utility. Especially in outlying areas, a tanker filling station with the prepaid supply unit simplifies the settlement of bills with bulk water customers. The filling stations are outfitted with hydrometers from 2 to 10 Inch.

Card payment method

or

Payment with mobile and card or PIN authentification

Water Supply Industry

The Prepaid Meter Dispensing Units can also be used in the water supply in the industry. By choosing time of the day based water prices, an incentive can be created that the industrial main consumers of water do this for example in the nights to better prices. Demand peaks can be smoothed out in this scenario and the availability of water, at given capacity, be increased during the day for the domestic supply.

Card payment method

or

Payment online

Water Supply Irrigation

The system can not only be used in prepaid mode for a modern and efficient irrigation, but also as intelligent, remotely configurable distribution instrument. For this purpose flexible Dispensing Units can be combined to already existing, electronically controllable valves and water meters.

Card payment method

or

Payment online

Product Specification for Water

The iSAtech Prepaid Metering System can be adapted to different field requirements.

Power supply

The systems can either be operated with an integrated battery, an external rechargeable battery or an external power supply.

Meter/Valve

In order to meet different requirements, such as supply water pressure, availability of energy and quality of the water, the iSAtech Prepaid Metering System can be operated with both bistable and forced-control valves. Depending on the requirements, impeller counters, piston counters or ultrasonic counters can be used.

Casing

The iSAtech Prepaid Metering Systems are operated with a flexible, remote control unit. Alternatively, the systems can also be equipped with a robust housing, depending on the requirements.

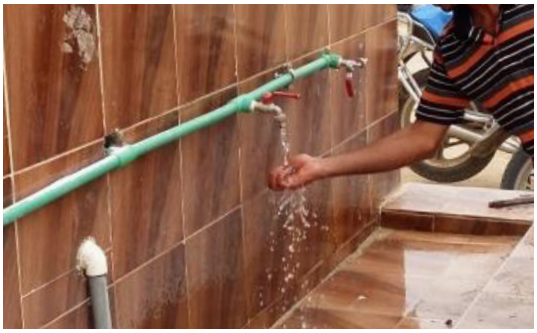
Energy									
Battery	•	•				•			
Accu	•	•	•	•	•				
extern	•	•	•	•	•	•	•	•	
Valve									
bistable	•	•	•	•	•	•	•	•	
positively controlled			•	•	•				
Case									
extra	•	•	•	•	•	•			

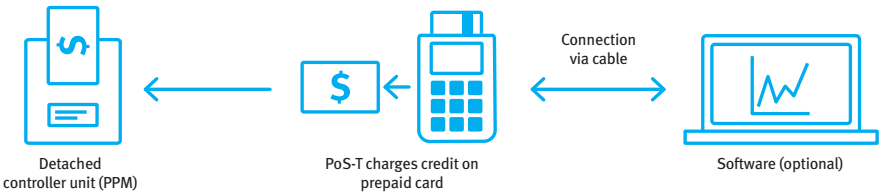
Data Management and Payment Methods

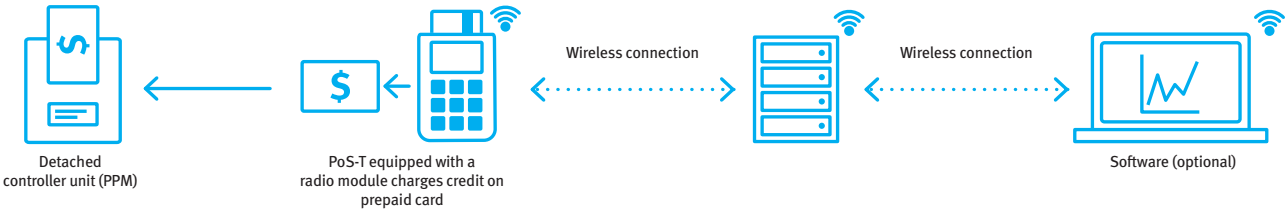
All system data such as user, credit, consumption, overview of installed PPM can be viewed, managed and edited in the software. The way the data goes to the software depends on the selected configuration of the system.

Card Payment Method

If the credit is stored on cards, the card serves as an information carrier at the same time and is charged with the PoS-Terminal. If the loaded card is placed on the Prepaid Meter Dispensing Unit the corresponding medium can be used until the credit has been exhausted. On the card, data of the unit such as meter reading or consumption can be stored and transferred to the PoS-T. The collected data on the PoS-T (e.g. charging processes or users) can now be transferred to the software on a PC by either connecting the PoS-T with the PC via USB cable or optionally wireless in real time with a radio module equipped PoS-T.



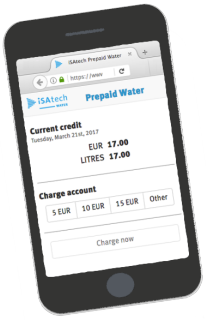


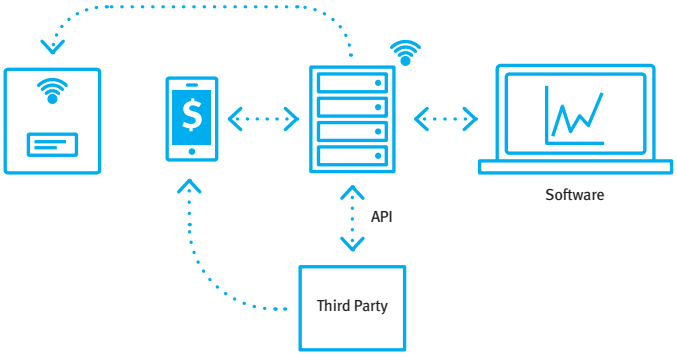


Data management and payment methods

Mobile Payment Method

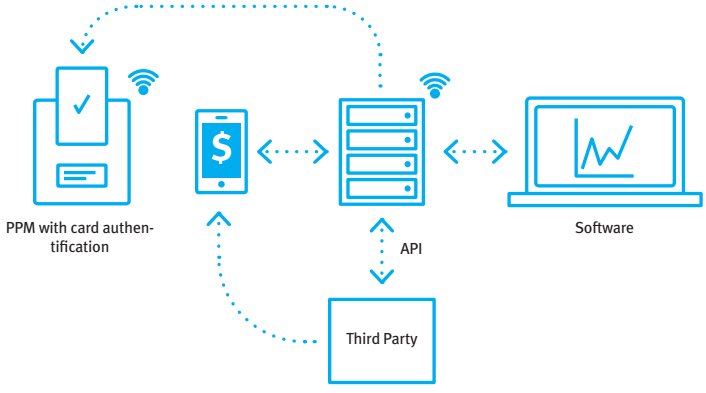
The credit is charged via mobile phone on the Internet with secure payment options. The user buys his credit with his device via the web interface.
The request and release are processed via a secure connection from the server. It is also possible to work with a third party like M-Pesa or similar. The server relays the information in real-time to the wireless Prepaid Meter Dispensing Unit and the software. The user can use the system immediately after purchasing credit until the credit is exhausted.





Payment With Mobile and Card Authentification

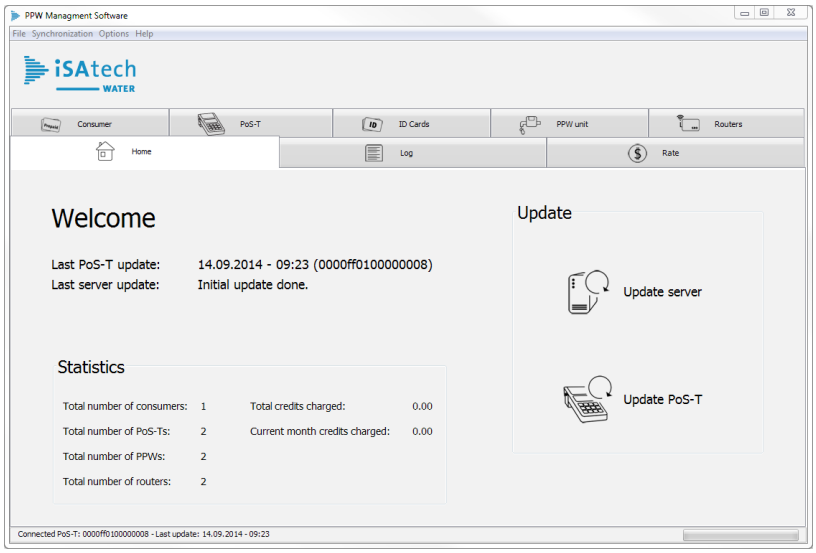
The user buys his credit with his device via the web interface.
The request and release are processed via a secure connection from the server. It is also possible to work with a third party like M-Pesa or similar. The server relays the information in real-time to the wireless Prepaid Meter Dispensing Unit and the software. In order to use the desired medium, the user has to authenticate himself to the Prepaid Meter Dispensing Unit. This can be done with an authentication card that he places onto the unit, or by entering his personal PIN on the optional key pad.



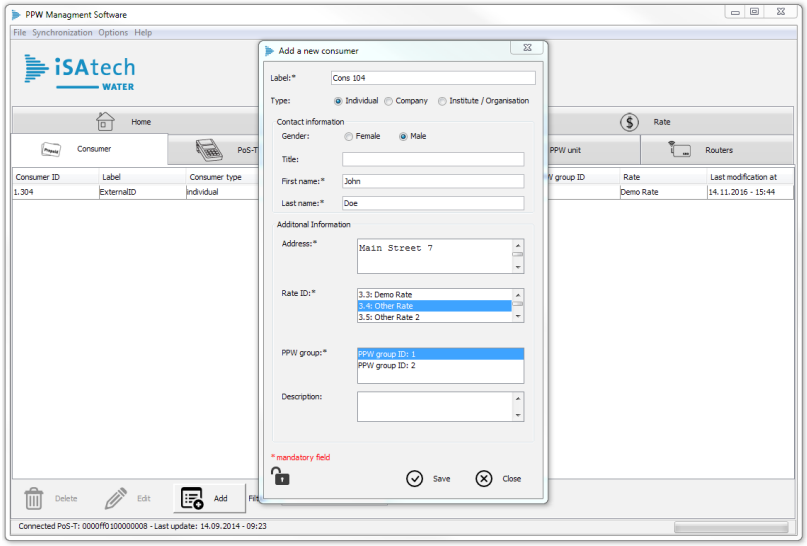
Software

The software can be used to record, edit and evaluate all data in the system.

All Prepaid Meter Dispensing Units, routers, PoS-Ts, user cards and ID cards can be managed with the software. Detailed data can be stored for each user. Various tariffs, such as free quantities, scaling prices or fixed prices, can be adjusted globally for the system. Comprehensive reports on the completed charges, consumption and transactions can be viewed directly in the software and exported for statistical evaluation.



A simple and clear view gives quick information about central data such as the amount of water dispensed and the purchases made.



The easy-to-use software can be used both online and offline. All management tasks can be done quickly here.

Software

Managing

Information about the Prepaid Meter Dispensing Units, operators and consumers can be comfortably managed and collected with the software on all operating systems. Here the rates are generated and assigned to the corresponding Dispensing Units. A differentiated user role system allows that individual users can be assigned different rights and tasks. Further functions for the optimization of the maintenance of the devices in the field are available as plugin.

Analyzing

All transactions, malfunctions and activities are collected in an extensive log. This can be filtered and analyzed conveniently. Export interfaces enable the further processing of data.

Security

Through the iSAtech Cloud services the system is extensively secured on all levels. All communication between server and components in the field are secured by individual encryption keys. Each transaction is tagged by a unique transaction number that is traceable system wide. The protection of the entire system is realized according to the high standards for cryptographic processes of the Federal Office for Information Security (BSI):
BSI TR-02102-1

Flexible

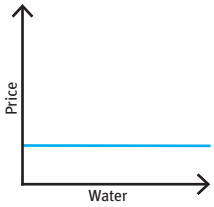
For independent use in the field, the software can be used both offline and online. Via the modern cloud infrastructure, the data is made available centrally and can also be used by third-party systems via a REST interface.

- Client server management system
- Software as a Service
- Data in real time
- Statistical analysis
- REST-API for third party systems
- Payment systems like PayPal or M-Pesa
- Offline client and online web access possible

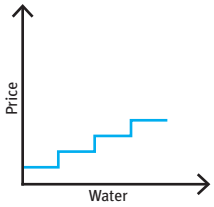
Rates

$

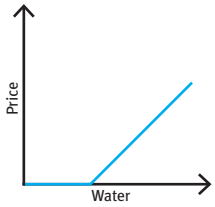
Each user group can be assigned a separate rate. The rates can be simple fixed price, but also time and volume dependent rates are possible.



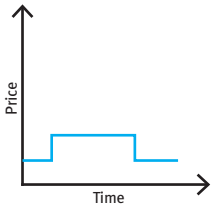
Fixed price
If this dispensing profile is employed fixed prices per liter are chosen, which are not variable. Fixed profiles are used especially in public water since the price per liter is always constant but most notably independent of the water amount drawn.



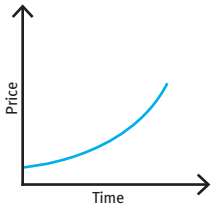
Scaling prices
Scaling prices are configured so that predefined amounts of water are available at differing prices. They are used predominantly for domestic connections. The less water is consumed, the better the prices are per liter.



Free quantities
A definition of free quantities of water is possible, where a defined amount of liters is consumed free of charge. Only after exhaustion of this amount will the payment for the drawn water be necessary. This profile is employable in public water as well as in domestic connections.



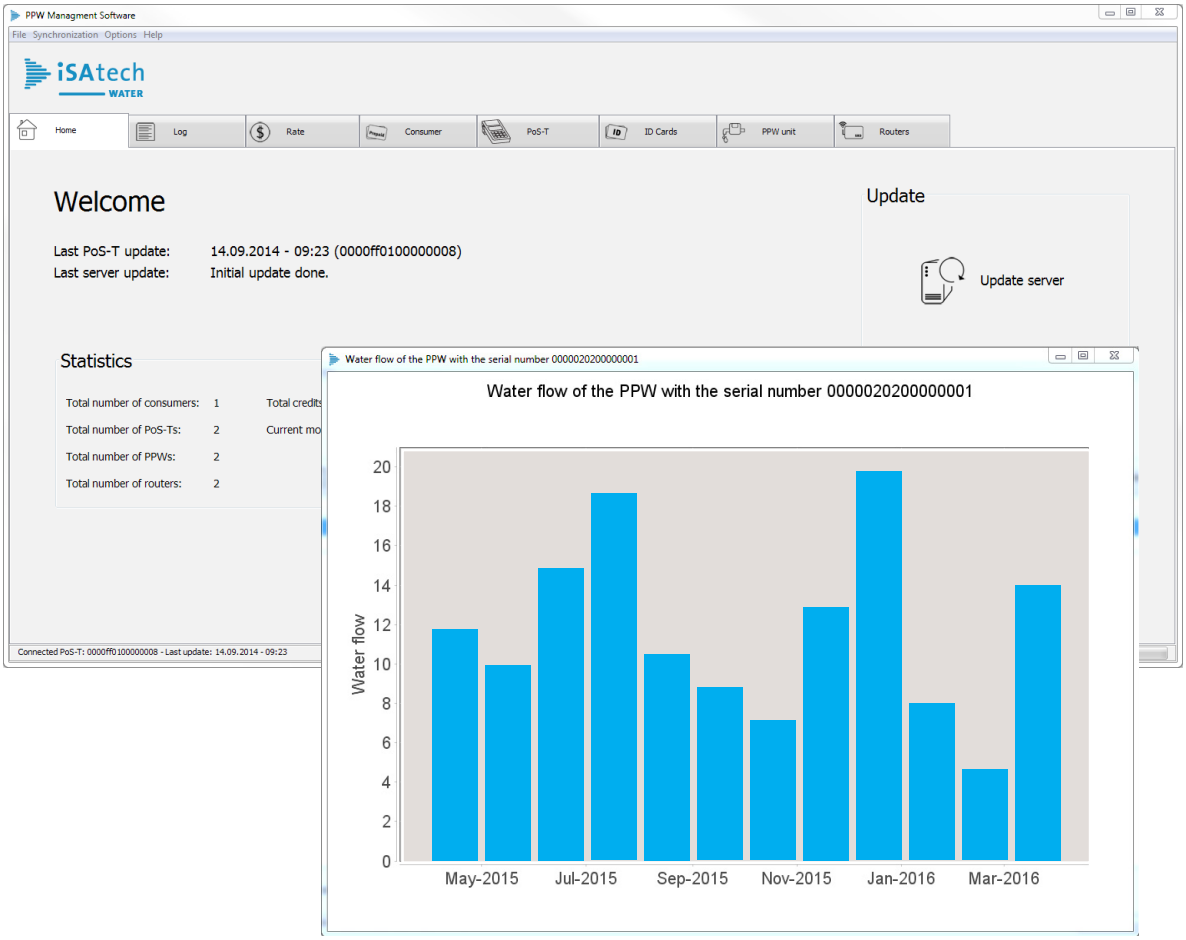
Prices as per time of the day
With this profile the prices per liter can be varied depending on the time of the day. Therefore giving the utilities the opportunity to influence the demand by using the water prices. In peak times the water price can be increased to create an incentive to smooth out the demand.



Prices for time intervals
In using this supply profile prices for predefined time intervals can be chosen. A camping site for example has the opportunity to fix higher prices for a shower of 10 minutes than a quick shower of 3 minutes.

Statistics

With the iSAtech software you can easily evaluate data using a graph, both directly from the software, as well as via the web interface of the server.



- Graphical evaluation offline directly from the management software
- Graphical evaluation over the Internet with the browser
- Data available in real-time
- Limited online access to individual statistics for users
- REST interface for evaluation of data by third-party systems

Product Overview

Dispensing Unit
p. 16

Boxed iSA box
DN 15 - DN 25
p. 18

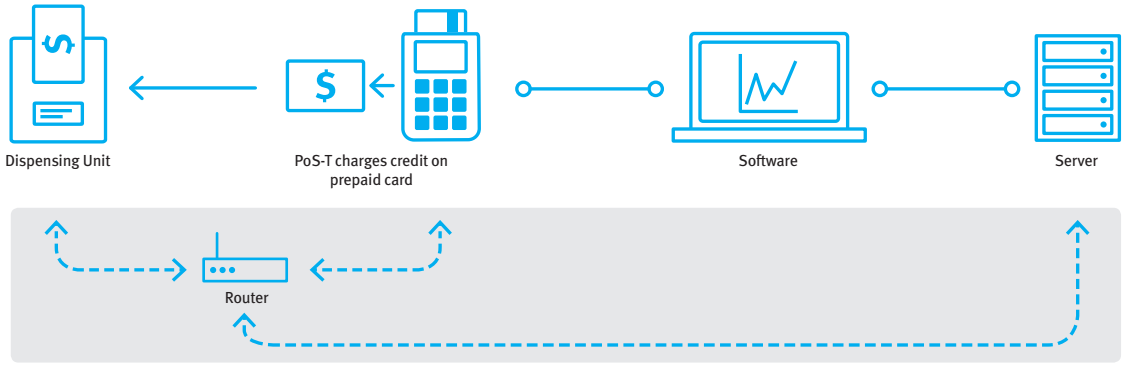
Router
p. 24

PoS-T
p. 22

Boxed iSA bulk
DN 50 - Dn 250
p. 20

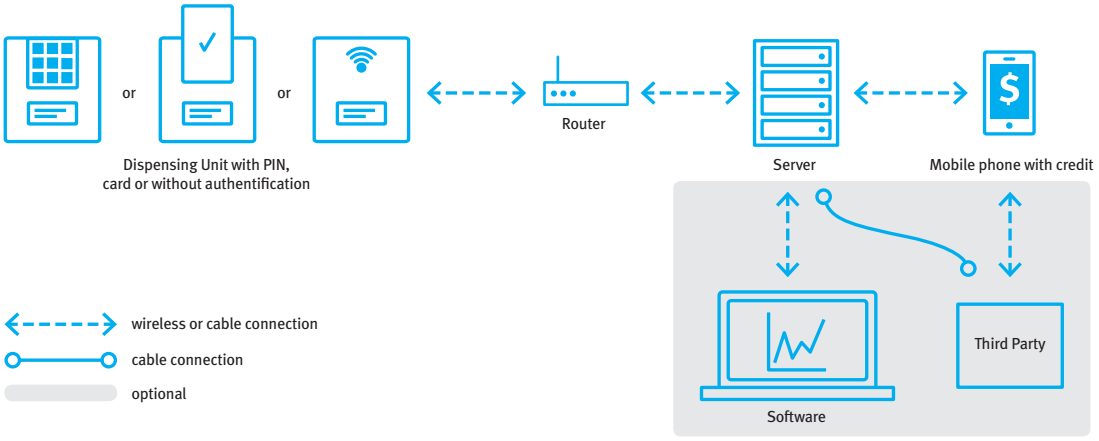
What You Need

Use case with prepaid card



wireless or cable connection
cable connection
optional

Use case with mobile



wireless or cable connection
cable connection
optional

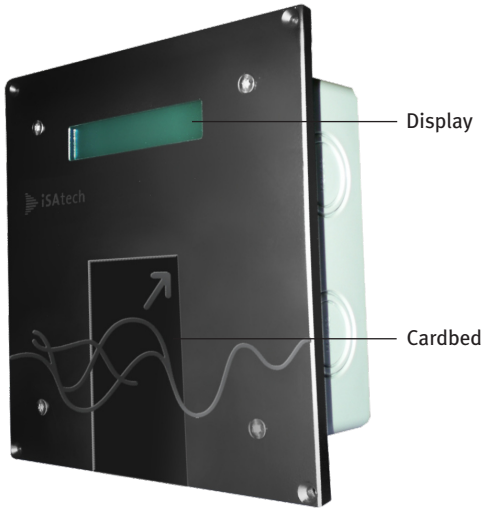
Prepaid Meter — Dispensing Unit

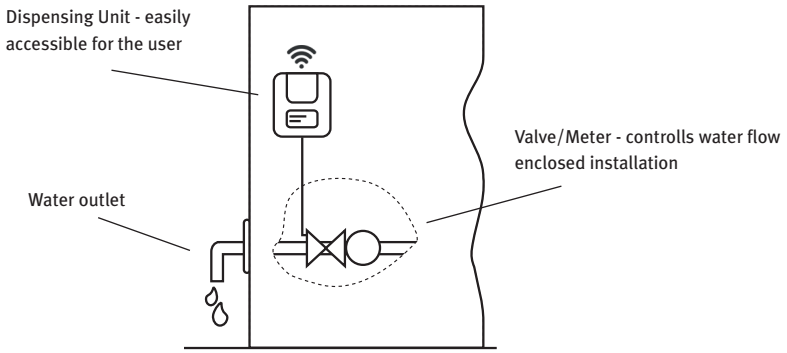
Dispensing Unit of Prepaid Metering System

The Dispensing Unit can be installed detached of the water technology easily accessible for the user. If the system is used with Prepaid cards, here the cards are applied and consumption is written to the card according to the assigned rate. If online system is chosen the Dispensing Unit serves as local control of the supply and is connected by GSM/UMTS or WiFi router respectively via the Internet to the server system. The Controller Unit is connected to the meter and the valve.

Pay as you Use

If the user disposes of valid Pay as you Use credit, the supply system is opened and the volume is measured and accounted for.



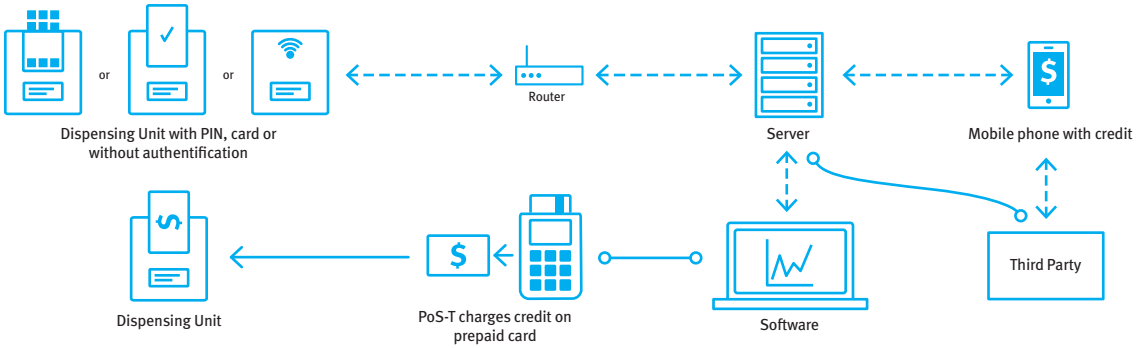


Power supply and mobil network

The power supply of the supply unit can be realized by an external power source (for example solar) or by a rechargeable battery. If the supply unit is fitted with an optional radio module, all consumption data can be transferred via GSM/UMTS or WiFi router by Internet to the server where it can be analyzed.

Charging of credit via Internet or by prepaid card

Prepaid credit can be purchased via a NFC-prepaid card or with a mobile phone online. With the charged card the valve is opened. If the credit is purchased online, the valve opens either immidiately or an identification by card or PIN might be requested.



Prepaid Meter — Dispensing Unit

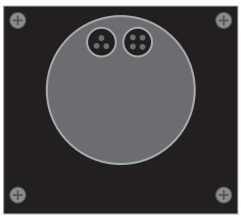
Technical Data

Charging	Prepaid Card Mobile Network / Internet
Technology	NFC/RFID Card ISO/IEC 15693-2,-3; 18000-3 433MHz / 868 MHz / 2,4 GHz*
Profile	Domestic Public Water (Kiosk) Water quantities Time based supply
Functions	Supply of water/ electricity/ heat/ gas Counting, accounting, logging Supply by NFC-card Supply by Internet / Mobile network
Power	3,6 V battery (up to 8 years), 7,2 V rechargeable battery or external power 14-32 VDC
Connectivity	Reed switch or impulse and bistable valve 9VDC (impulse), valve N.C. (12VDC, 1A max.) or electro-magnetic contactor
Pulse	configurable (i.g. 1l, 10l, 1kwh)
Display	Graphical LCD (55 mmx 18 mm)
Security	AES-256
Conformity	CE-Sign R&TTE-Directive 1999/5/EG
Protection	up to IP67
Temperature	0 to 55° Degrees Celsius
Humidity	0 to 95%
Dimensions	97mm x 97mm x 27mm (without connecting plugs) 150mm x 150 mm x 30 mm

* optional

Possible configurations

Energy	Battery (up to 8 Years)	Rechargeable battery	External Power (14-32 VDC)
Valve	bistable valve (9 VDC impulse)	forced piloted operated valve (12 W)	



External power / rechargeable battery connection

Connection to Water Tap (valve and meter)

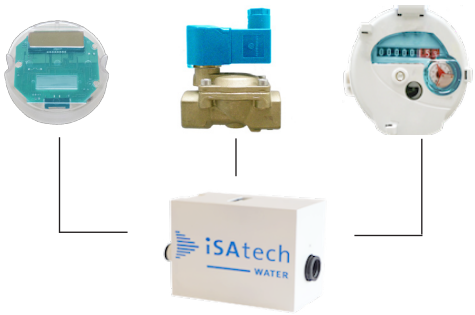
Prepaid Meter — iSA Box

iSA Box - Compact prepaid water supply system

The iSA Box is a compact prepaid water dispensing unit with integrated, battery operated controller unit, bistable valve and a water meter. iSA Box is explicitly designed for the use in the domestic profile. The user is charging the credit to the unit and is constantly using the Pay as you Use credit. In this profile, time and volume based rates are implementable. Charging is realized either online via the iSAtech server (iSAtech router required) or by prepaid card. The integrated battery allows a life time of up to 8 years.

Pay as you Use

If the user disposes of valid Pay as you Use credit, the supply system is opened and the volume is measured and accounted for.

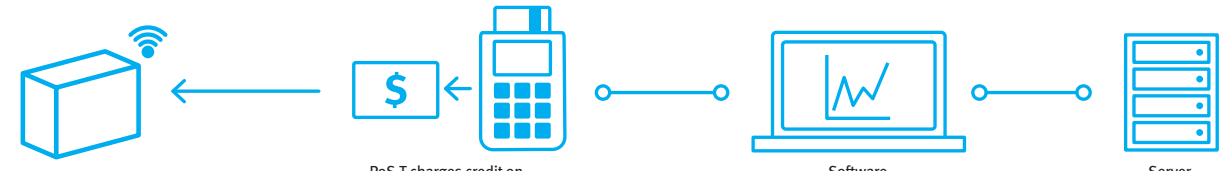


Prepaid Meter in Households

Using the Prepaid Meter offers a considerable simplification of the settlement of water costs for the landlord or utility service. The costs for the water are paid in advance by the customer by purchasing a prepaid credit. Supply profiles with timely limited free batches of base water quantities or time oriented scaling prices allow a flexible price calculation.

Charging of credit via Internet or by prepaid card

Prepaid credit can be purchased via an NFC-prepaid card or mobile over the Internet. The valve is opened by card or online. Lost cards can be restored including the existing credit. A reserve warning informs of the impending depletion of the credit.



Prepaid Meter — iSA Box

Technical Data

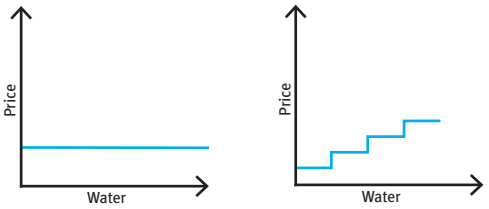
Charging	Prepaid Card
	Mobile Network / Internet
Technology	NFC/RFID Card
	ISO/IEC 15693-2,-3; 18000-3
	433MHz / 868 MHz / 2,4 GHz*
Profile	Domestic
	Water quantities
	Time based supply
Protection	up to IP67
Energy	7,2 V lithium battery,
	up to 8 years
Display	Full Graphic LCD (55 mmx 18 mm)
Security	AES-256
Conformity	CE-Sign
	R&TTE-Directive 1999/5/EG
Connection size	265mm
Dimensions	258mm x 118 mm x 170 mm
Weight	2,25 kg
	* optional

Valve

Type	hydraulically operated
Material	Glass-Filled Nylon
Diaphragm	Natural Rubber
Temperature	Up tp 60°C
Max. Pressure	10 Bar
Min. Pressure	0.7 Bar

Water Meter

Type	piston
Material	composite
Permanent Flow Q3	4 h/m³
Maximum Flow Q4	5 h/m³
Transitional Flow Q2	40 h/l
Minimum Flow Q1	25 h/l
Ratio (Q3/Q1)	R 160



Rates

Fixed Price	fixed prices per liter
Scaling Prices	Price per liter is depending on the already consumed amount of water

Prepaid Meter — iSA Bulk

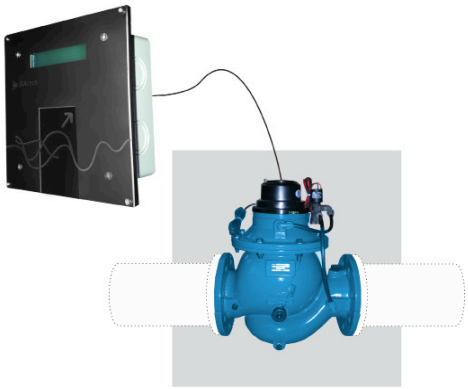
Prepaid Metering for industry and irrigation

The iSAtech Prepaid Water Meters are available as compact water dispensing systems from DN20 up to DN250. The iSA Bulk was designed for implementation in the industrial field or irrigation. This system comprises of a integrated meter with valve, the iSAtech Controller Unit as well as a robust steel casing. With its integrated power supply it can be configured for supply with prepaid card or online credit. The credit is charged to the unit and can be used according to the rate over a certain amount of time.

Online statistics

If the supply system is fitted with a radio router all transactions can be logged and transferred to the server periodically and are therefore available at all times.

Case optional

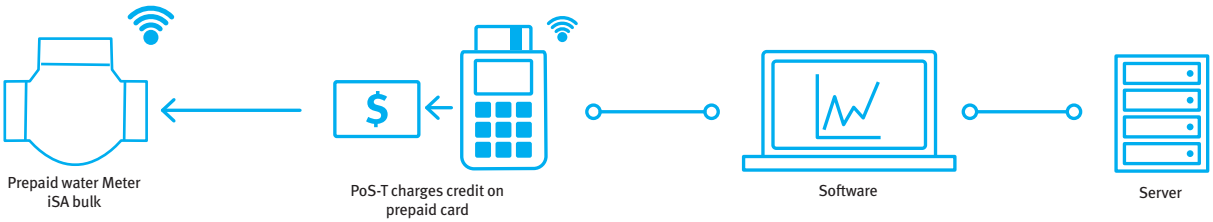


Prices as per time of the day

With this profile the prices per liter can be varied depending on the time of the day. Therefore giving the utilities the opportunity to influence the demand by using the water prices. In peak times the water price can be increased to create an incentive to smooth out the demand.

Charging of credit via Internet or by prepaid card

Prepaid credit can be purchased via an NFC-prepaid card or mobile over the Internet. The valve is opened by card or via the Internet. Lost cards can be restored including the existing credit. A reserve warning informs of the impending depletion of the credit.



Prepaid Meter — iSA Bulk

Technical Data

Charging	Prepaid Card
	Mobile Network / Internet
Technology	NFC/RFID Card
	ISO/IEC 15693-2,-3; 18000-3
	433MHz / 868 MHz / 2,4 GHz*
Profile	Domestic
	Water quantities
	Time based supply
Protection	up to IP67
Energy	7,2 V lithium battery, up to 8 years or external power (14-36 VDC)
Display	Full Graphic LCD (55 mmx 18 mm)
Security	AES-256
Conformity	CE-Sign
	R&TTE-Directive 1999/5/EG
Casing	optional
Valve Type	hydraulically operated
Material	Composite, glass-filled nylon, brass
Diaphragm	Natural rubber
Temperature	Up tp 50°C
Min. Pressure	0.7 Bar
	* optional

Rates

Fixed Price	Fixed prices per liter
Scaling Prices	Price per liter is depending on the already consumed amount of water. Reference time scale is the current month or calender month.
Daytime Price	Prices per liter can be varied depending on the time of the day.

Size		Q1 (m^3/h)	Q2 (m^3/h)	Q3 (m^3/h)	Q4 (m^3/h)	Q3/Q1	Max. Pressure	Class ISO 4064-1-1993
2 Inch	DN50	0,8	1,3	40	50	50	16 bar	A
3 Inch	DN80	1,2	3	100	125	83	16 bar	B
4 Inch	DN100	1,8	4,5	160	200	89	16 bar	B
6 Inch	DN150	4	10	250	313	63	16 bar	B

options

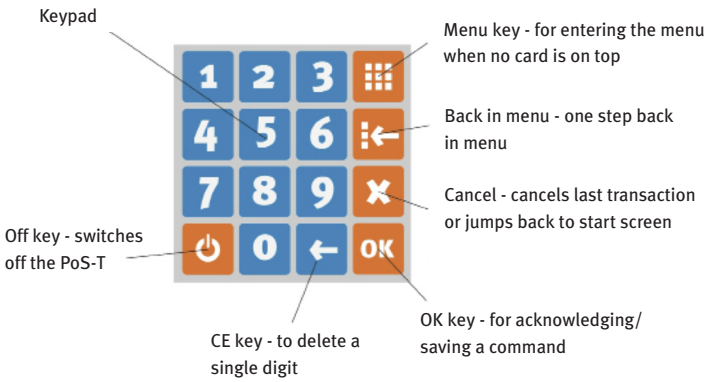
Prepaid Meter — Point of Sale Terminal

Charging of NFC prepaid cards

The Point of Sale-Terminal (PoS-T) enables the charging and basic management of prepaid cards. The cashier can use the PoS-T to charge the cards and assign rates to customers. All data and transactions are securely saved and can be transferred to the software via USB for further analysis on the server. To charge prepaid credit with the PoS-T, the cashier has to be identified at the PoS-T with an ID card and PIN so all transactions are traceable.

Radio linkage by mobile network

If the PoS-T is fitted with the optional radio module all transaction data is transferred to the server directly via the iSAtech GSM/UMTS or the WiFi router respectively. The PoS-T is powered by an internal, rechargeable battery.

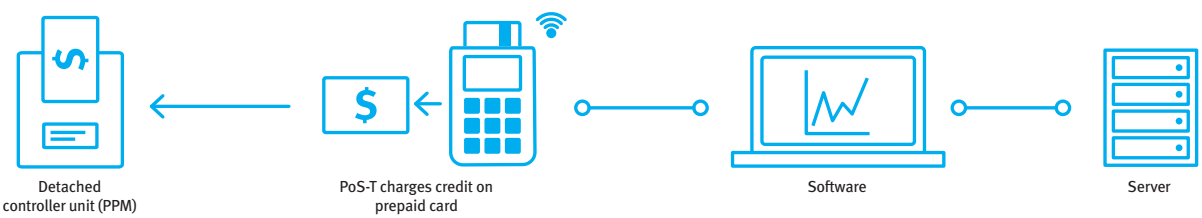


Charging of prepaid credit

Place a prepaid card onto the powered Point of Sale-Terminal. If the prepaid card is assigned to the PoS-T, it will display first the user and its corresponding rate. Then the current balance on the card is shown. Enter the amount to be charge and confirm. The prepaid credit is charged to the card and the card is ready to use.

PoS-T and administration

The PoS-T is synchronized with the management software. All administration tasks can be realized comfortably and intuitively with our software. If the software is linked with the iSAtech Server, all data and statistics are available anywhere, anytime. Additionally the PoS-T can send the data directly to the server with a radio module.



Prepaid Meter — Point of Sale Terminal

Technical Data

Charging	Prepaid Card
Technology	NFC/RFID Card
	ISO/IEC 15693-2,-3; 18000-3
Connection	USB
	433/868 MHz or 2,4 GHz*
Profile	Domestic
	Public Water
	Water quantities
	Time based supply
Functions	Charging of Prepaid cards
	Creation of Prepaid cards
	Assignment of rates
	Collection of logs
	Canging of time at the PPW
	Reading of logs of the PPW
	Synchronization with the software
	Creation of support cards
	Login with ID cards
	Changing the PIN
Storage	2000 max. log entries
	3000 max. user
Power	3,6 V lithium battery
	USB connection
	up to 14 days standby
Display	Full Graphic LCD
Language	English
	German
Security	AES-256
	ID-Cards and PIN
	Conform to standards for cryptographic processes of the German Federal Office for Information Security (BSI): BSI TR-02102-1
Conformity	CE-Sign
	R&TTE-Directive 1999/5/EG
Protection	up to IP66
Temperature	5 to 55° Degrees Celsius
Humidity	0 to 85 %
Dimensions	100mm x 200mm x 26mm
	* optional

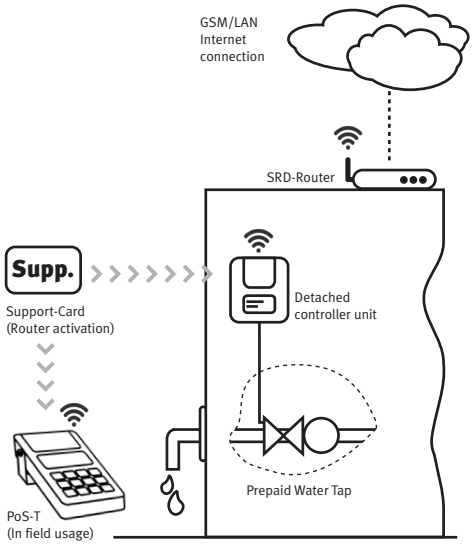
Technical Data NFC-Card

Type	Cost efficient standard
	MIFARE Ultralight C card
Technology	ISO/IEC 15693-2,-3; 18000-3
Security	Applicativ: AES-256
	transaction numbers
	multiple unique keys

Prepaid Meter — Router

Prepaid Meter — Router

The optional iSAtech router is obtainable in the configuration GSM/UMTS, WiFi or LAN. The communication to the Dispensing Units and the Point of Sale-Terminal is realized by 433MHz, 868MHz or 2,4GHz. With this the linking of up to 50 devices in a radius of up to 1 km is possible. The connection to the server is done via Internet and depending on configuration, mobile network, WiFi or LAN. The GSM/UMTS configuration is designed redundantly and allows the use of two different mobile network providers.

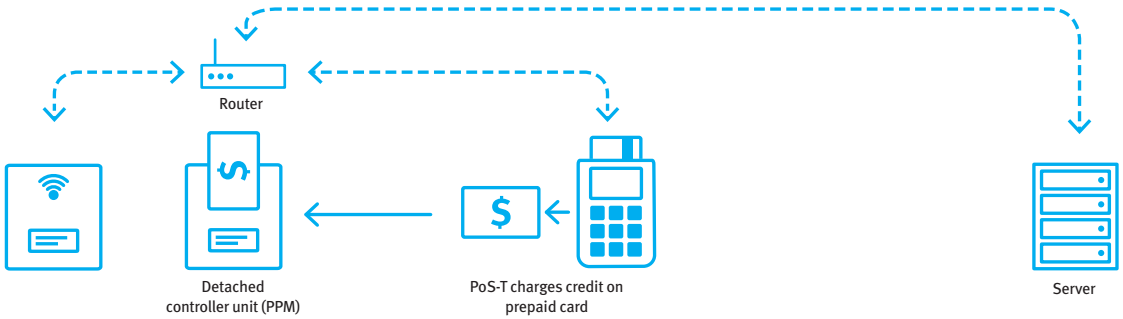


Synchronization

The synchronization interval can be configured to the customers' needs, therefore allowing for balance between fast data transfer and cost effectiveness. The power supply is realized externally by battery or solar plant.
If a firmware update for the router is necessary it is automatically downloaded during the synchronization process and afterwards installed.

Data transfer and provision

The router is synchronizing itself periodically with the server. The data is stored at the router and the systems in the field like the Dispensing Units and Point of Sale-Terminals retrieve the data and transfer their logs respectively.

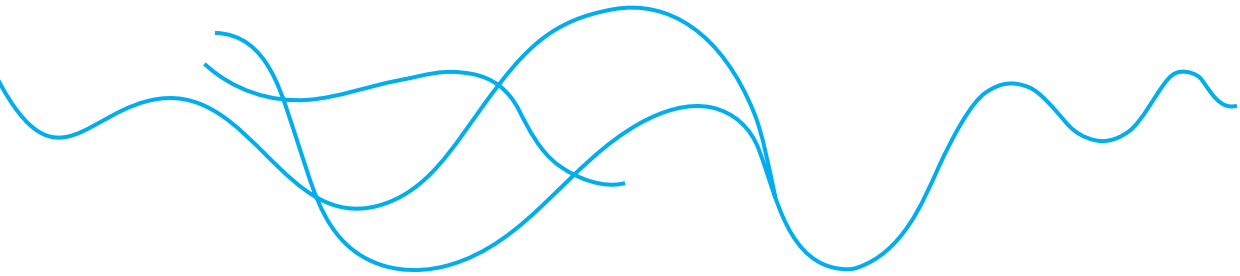


Prepaid Meter — Router

Technical Data

Controller	Powerfull Linux-ARM architecture
Connection local	433 MHz ISM band up to 0,5 km
	868 MHz ISM band up to 0,5 km
	2.4 GHz ISM band
	encrypted two-way-communication
Connection server	GSM Quad-band 850/ 900/ 1800/ 1900MHz GPRS class 12/10
	2 SIM (redundant)
	WLAN IEEE 802.11b/g*
	LAN (100-Mbit/s-Ethernet)*
Functions	Receiving and storing of logs of all systems in reach
	Transferral of logs by mobile network or WiFi
	Synchronization of virtual credit (charging over Internet) with the server
	Provision of the virtual credit for all assigned PPW in range
	Blacklist for PoS-T
	Update-over-air
	Fallback to a second GSM modem if mobile network is not available
	Configuration automatically via server
Syncronization	Configurable: 1 min up to 24h
Security	AES-256

Display	LCD/LED
	Status display,
	Configuration display
Conformity	CE-Sign
	R&TTE-Directive 1999/5/EG
Power	14-32 VDC max. 1 Ampere
Protection	up to IP66
Temperature	5 to 55° Degrees Celsius
Humidity	0 to 95%
Dimensions	100mm x 100mm x 50mm
	* optional



About us

iSAtech is a German company from the area of industrial electronics and transponder technology which offers products prepaid water supply systems. Based on a patented low energy transponder technology it enables water supply through prepaid procedure. In cooperation with leading valve supllіers the water distribution systems of iSAtech have been developed to be used in harsh enviroments.

The applications range from household taps to industrial valves. 20 years‘ experience of iSAtech in developing modern industrial electronics and innovative controllers together with the support of the federal ministry of economy and technology in development of patented low energy transponder technology ensures the sustainable marketing leadership in prepaid transponder technology.

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