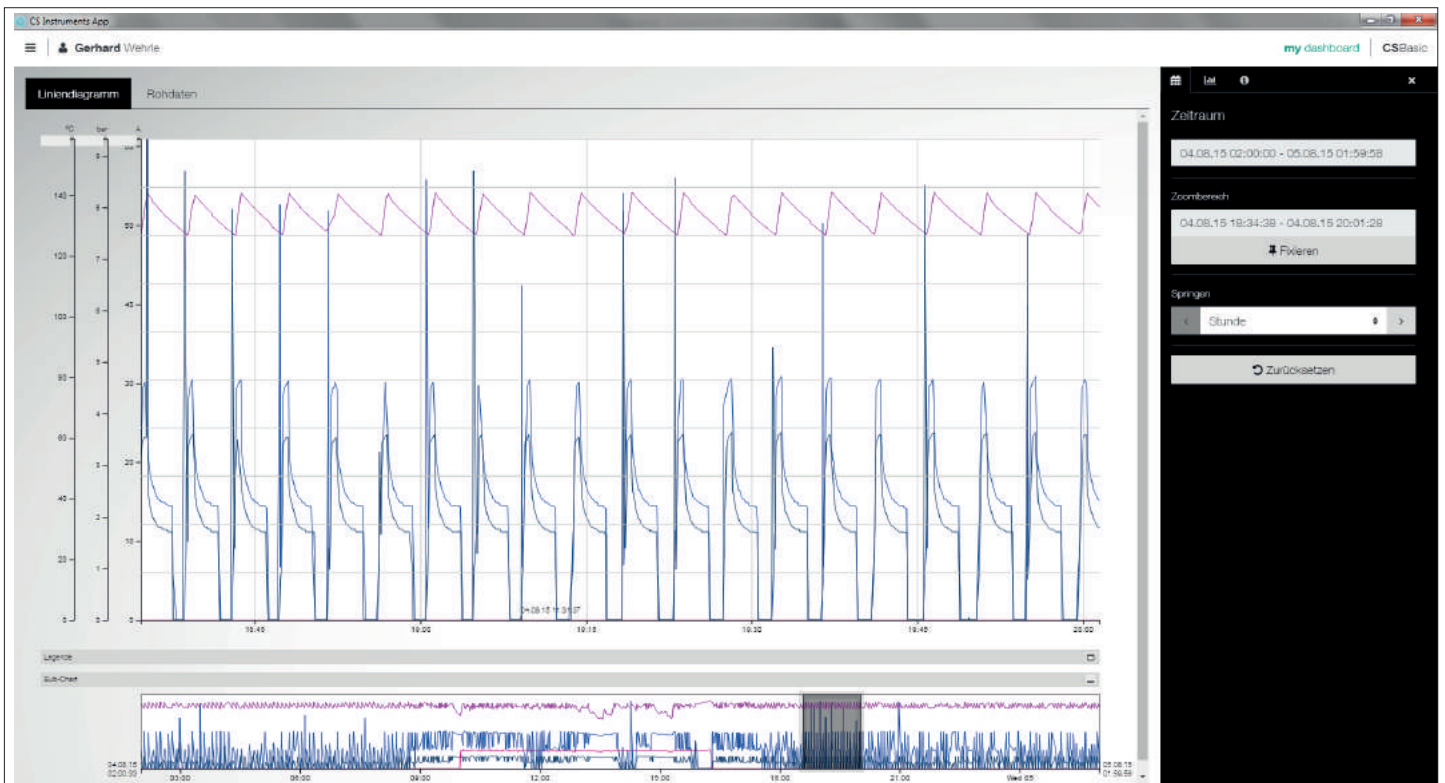# CS Basic

With the CS Basic, the chart recorder DS 500/400 and all mobile devices with data logger can be read out. Depending on the device, data transfer is performed either via USB stick or Ethernet connection.

CS Network

The CS Network is a client-server solution. The server software automatically collects the measured values of all CS chart recorders and CS sensors embedded in the company's computer network and stores them in a database. The evaluation / analysis of the measured data is carried out via the evaluation software (client) at any number of workstations.

	CS Basic	CS Network
Installation	Local PC installation	Server (virtual machine) Client (browser-based)
Data memory	Database (local)	Database (server, virtual machine)
Updates to new releases free of charge	Ja	Ja
Automatic notification of upgrades	Yes (only in case of Internet access)	Ja
Number of workstation licences	2	Unlimited
Number of measured values	All measured values that are transferred by a device. (max.1 device at the same time)	up to 20 / 50 / 100 / 200 measured values
Data transfer	USB stick (manually) or Ethernet	Ethernet
User management	No	Ja
E-mail in case of threshold value exceedance	No	Ja
Storage of measured data	Logger data must be read-out manually via CS Basic	CS Network automatically stores the measured data of all connected devices

Common functions:

Graphic evaluation

All measurement curves are indicated in colour. All necessary functions are integrated, such as free zoom, selection/deselection of single

measurement curves, free selection of periods, scaling of the axes, selection of colours and so on.
Different data can be combined in a shared file. This view can be saved as a PDF file and sent as an e-mail.

Table view

All measuring points are listed with exact time interval. The desired measuring channels with the name of the measuring place can be selected via the diagram explorer.

Statistics

All required statistic data are visible at a glance. So the user can see very quickly which minimal or maximal measured values occurred when and for how long.

Flow evaluation

The software carries out flow analysis for all connected flow meters, optionally as a daily, weekly or monthly analysis.

Data export according to MS-Excel® or csv

The measured data can be exported to Excel or csv.

Rates

The price per consumption unit can be can be stored for each energy form. Depending on the time and day, different tariffs can be stored. The validity of the tariffs can be defined via calendar function so that price increases or decreases can be updated.

Multilingualism

The user interface is included in German, English and further languages in the scope of delivery.

Alarm history / Alarm log file

The threshold value exceedance is documented with the CS Network.

Management of the measuring sites

Each CS sensor or each CS chart recorder can be assigned to a department/hall (or cost centre).
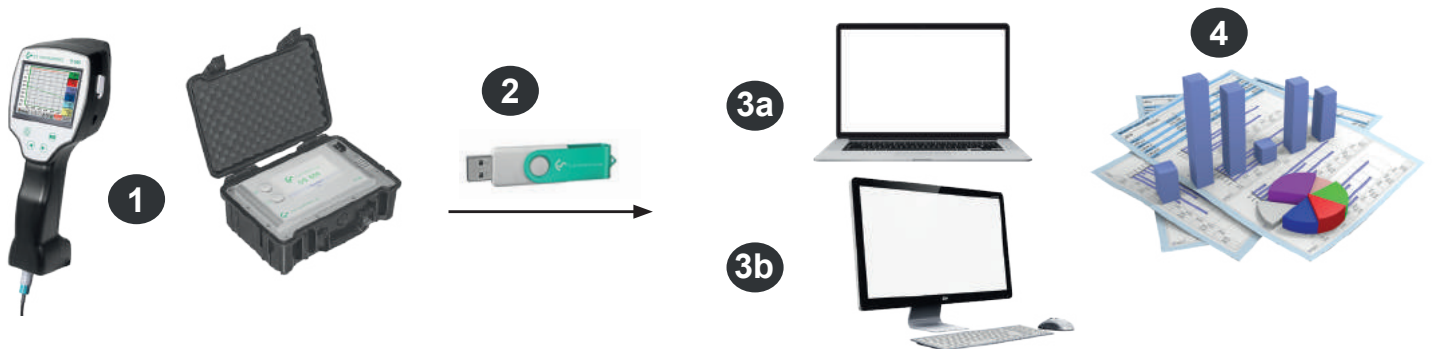
Optional add-on modules:

Module "formula editor"

By means of the formula editor, the measured values of 2 sensors can be added or subtracted from each other.
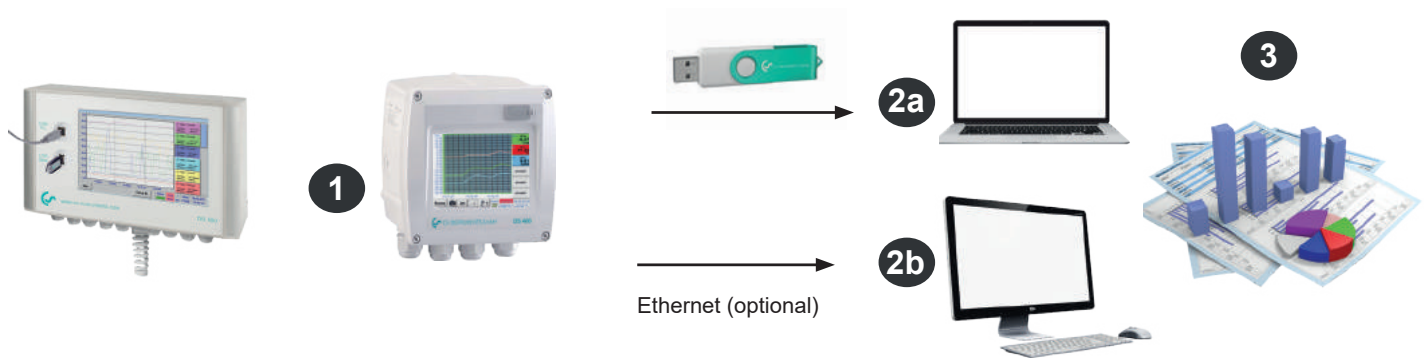
CS Basic

Data evaluation during mobile measurement:

1 Mobile measurement at the customer. Measured data are saved in the data logger in the selected measuring cycle

2 Export of the data to USB stick

3a Import of the measured data to the laptop directly on-site

3b Import of the measured data to the computer in the office

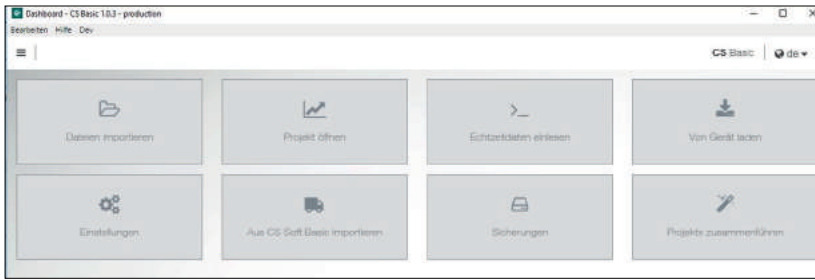**4** Evaluation and print out of the measured data

Data evaluation for firmly installed chart recorders in the company:

Ethernet (optional)

1 Chart recorder is firmly installed in the company. Measured data are saved in the data logger in the set measuring cycle.

2a Transfer of the data via USB stick to the computer

2b Readout of the logger data via the computer network (LAN) by means of CS Basic

3 Evaluation and print out of the measured data

DESCRIPTION	ORDER NO.
CS Basic – data evaluation graphically and in tabular form - reading of the measured data via USB or Ethernet, license for 2 workstations	0554 8040
Additional license for 1 further workplace	Z554 8040
Module "Formula Editor" – by means of the formula editor, the measured values and constants can be calculated with one another (addition, subtraction, division, multiplication, root function, exponentiation)	Z554 8010
Upgrade CS Soft Basic (0554 7040) to CS Basic (0554 8040). CAA module is no longer available. Please state old licence key when ordering	Z554 8041

CS Basic

Intuitive operation

- All important functions can be retrieved via the dashboard.
- Global settings: Adjust units and change decimal places, store company name and logo
- Import real-time data: Establish Ethernet connection to CS logger or sensor. Trace real-time measured values in graphic and in table form
- Import from CS Soft Basic: Data migration from the previous version of CS Soft Basic
- Data backup: Backup of the projects and the database

Graphic evaluation

All measurement curves are indicated in colour. All necessary functions like free zoom, selection/deselection of single measurement curves, free selection of periods, scaling of the axes, selection of colours and so on are integrated:
This view can be saved as a PDF file and sent as an e-mail. Different data can be combined in a shared file.

Datum	Gerät	A2.1 Pressure A2a bar	B3.1 Dewpoint DewPoint °Ctd	B3.2 Rel.Humid. %	B3.3 Temperatur °C
27.01.17 13:52:18	0	9,6749	-50,6462	0,1534	20,2556
27.01.17 13:52:28	0	9,676	-51,4187	0,1394	20,2517
27.01.17 13:52:38	0	9,6769	-52,0952	0,128	20,2499
27.01.17 13:52:48	0	9,678	-52,791	0,1173	20,2479

Table view

All measuring points are listed with exact time interval. The desired measuring channels with the name of the measuring place can be selected via the diagram explorer.

Kanal	Durchschnitt	Minimum	Datum von Minimum	Maximum	Datum von Maximum
B3.2 Dewpoint - Rel.Humid. (%)	0.1094 %	0.0549 %	15.02.17 13:50:38	0.4118 %	13.02.17 14:30:08
B3.1 Dewpoint - DewPoint (°Ctd)	-53.2789 °Ctd	-57.9552 °Ctd	27.01.17 13:54:38	-41.6251 °Ctd	13.02.17 14:38:08
B3.3 Dewpoint - Temperatur (°C)	22.072 °C	20.1182 °C	27.01.17 13:59:58	26.0402 °C	14.02.17 06:25:38

Statistics

All required statistic data are visible at a glance. So the user can see very quickly which minimal or maximal measured values occurred when and for how long.
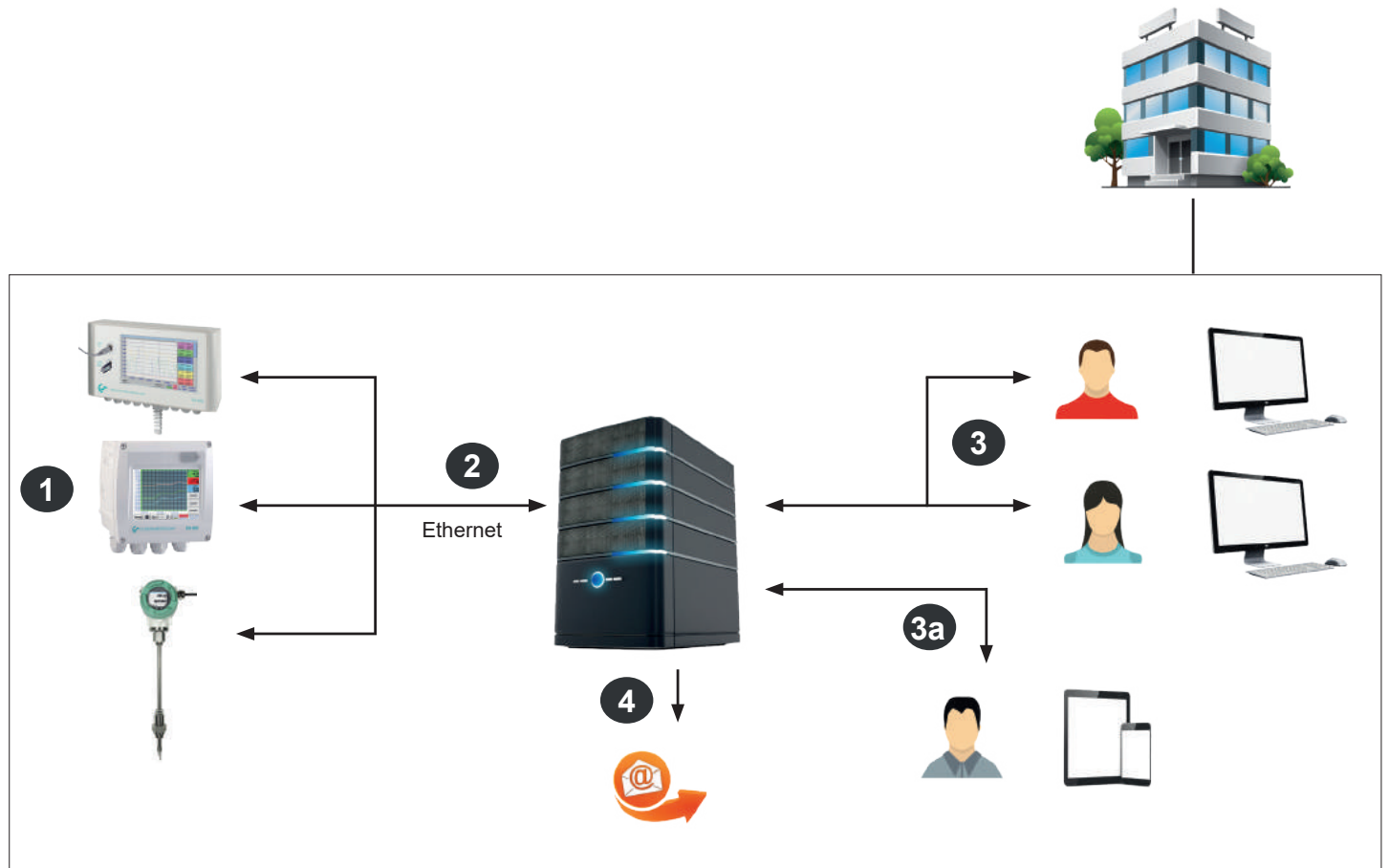
		Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember	Summe
A1.2 Verbrauch Halle 1 - A1b (m³)	Von (m³)	1.958.827	2.076.325	2.215.062	2.368.464	2.514.612	2.666.480	2.826.483	3.002.938	3.169.484	3.318.642	3.491.661	3.659.617	
	Bis (m³)	2.076.325	2.215.062	2.368.464	2.514.612	2.666.480	2.826.483	3.002.938	3.169.484	3.318.642	3.491.661	3.659.617	3.775.973	
	Verbrauch (m³)	117.498	138.737	153.402	146.148	151.868	160.003	176.455	166.546	149.158	173.019	167.956	116.356	1.817.146
	Kosten (€)	2.232,46	2.636,00	2.914,64	2.776,81	2.885,49	3.040,06	3.352,65	3.164,37	2.834,00	3.287,36	3.191,16	2.210,76	34.525,774
A1.1 Verbrauch Halle 1 - A1a (m³/h)	Minimum (m³/h)	0	6,3	0	0	0	1,36	0	0	0	0	0	0	
	Durchschnitt (m³/h)	157,6	205,98	205,8	202,54	203,52	221,66	236,5	223,25	206,67	232,19	232,67	155,99	
	Maximum (m³/h)	1.060,36	527,02	736,39	1.154	662,43	618,27	617,9	636,36	931,66	642,96	689,77	2.410,71	

Flow evaluation

The software carries out flow analysis for all connected flow meters, optionally as a daily, weekly or monthly analysis.

CS Network

Energy monitoring for compressed air and gases in an enterprise

1   Single sensors with Ethernet connection or chart recorders with several sensors measure the compressed air and gas consumption of all departments/cost centres in an enterprise.

2   The CS Network (Server Installation) automatically collects the measured values of all CS chart recorders and CS sensors which are connected to the computer network in an enterprise and stores them in a database.

3   The evaluation/analysis of the measured data is carried out via the evaluation software (Client) at an unlimited number of workstations.

3a   The evaluation software (Client) is browser-based and provides the user with quick access to the measured data via tablet or smartphone.

4   In case of an exceeding of the limit values (freely adjustable), there will be an automatic alarm via e-mail
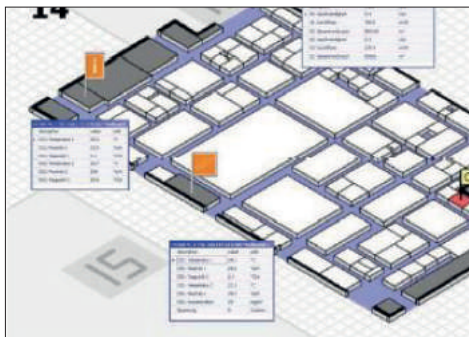
CS Network

Energy monitoring for compressed air and gases in an enterprise

Graphic display with zoom function:

- Selection of the measuring channels to be displayed
- Simple zoom in and zoom out
- Up to 8 y-axes
- Quick access to daily/weekly/monthly view

View: Actual measured values

- Load background image
- Place/fix measured values screen
- Red measured values in case of alarm exceedance
- Quick access to measured value history

		January	February		November	December	Sum
A1.2 Flow Hall 1 – A1b (m³)	From (m³)	1958827	2076325		3491661	3659617	
	To (m³)	2076325	2215062		3659617	3775973	
	Flow (m³)	117.498	138.737		167.956	116.356	1817146
	Costs (€)	2232.46	2636.00		3191.16	2210.76	34525.774

DESCRIPTION	ORDER NO.
CS Network – energy monitoring with client/server solution (max. 20 measured values of different sensors/devices)	0554 8041
CS Network – energy monitoring with client/server solution (max. 50 measured values of different sensors/devices)	0554 8042
CS Network – energy monitoring with client/server solution (max. 100 measured values of different sensors/devices)	0554 8043
CS Network – energy monitoring with client/server solution (max. 200 measured values of different sensors/devices)	0554 8044
Module "Formula Editor" – by means of the formula editor, the measured values and constants can be calculated with one another (addition, subtraction, division, multiplication, root function, exponentiation)	Z554 8010
Module "Cockpit Function" – By means of the Cockpit Function, you can create your personal background layout for the online values	On request
Module "Automatic Flow Evaluation" is e-mailed to a distribution list at the end of the month	On request
Module "Bar Chart, Pie Chart" for annual comparisons	On request